THE DEFINITIVE GUIDE TO
120+ NOOTROPIC
SUPPLEMENTS & DRUGS

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Nootropics are a class of nutrients, supplements, smart drugs, and nutraceuticals that are observed to improve brain performance and health. They may increase memory, learning, reasoning, intelligence, cognitive processing speed, verbal fluidity, attention, focus, motivation, mood and energy. They work in a variety of different ways, though many share similar mechanisms of action. Some increase the supply of neurotransmitters and other neurochemicals that are involved in intra- and inter-neuron communication as well as brain signalling pathways related to cognition, memory formation and recall. Some may enhance brain activity by modulating neuroreceptors, increasing the uptake of oxygen, glucose and other nutrients into brain cells or by promoting the underlying health of brain systems. Still other nootropics have been shown to stimulate the development of new neurons and synapses, increases the overall plasticity of the brain.

The phrase “nootropic” was coined by Dr. Corneliu E. Giurgea following the discovery of a remarkable substance known as “Piracetam”. His research team first synthesized this compound in 1964 when working at the Belgian pharmaceutical company UCB. His research into Piracetam was initially motivated by the search for a treatment for motion sickness. However, early trials with Piracetam found that it had a distinct ability to improve memory, mental processing, focus and performance across a battery of cognitive tests. Not only this, it lacked any significant side effects and did not share the pharmacology of typical psychotropic drugs such as nervous system stimulation or depression.

This was truly an unprecedented discovery and it opened the door to developing other cognitive enhancement drugs that could improve mental functioning in healthy adults as well as those suffering from brain disorders. In 1972, Giurgea coined the term “nootropic” to describe Piracetam and the class of yet-to-be discovered analogs of this substance. The term itself is of Greek origin, coming from the word “nous” which means “mind” and the root “tropo-” which translates into “turning” or “change”. Thus, we can think of nootropics as substances that change the mind in some way. Giurgea laid out a strict set of definitions for the class, requiring that they must enhance learning and memory, exhibit neuroprotective effects and show extremely low toxicity and almost no side effects.

Today, Nootropics are used by a broad range of society and for a broad range of purposes from improving academic performance to boosting productivity to supporting healthy brain function and preventing cognitive diseases such as Alzheimer’s and Parkinson’s. The following is a list of over 120 popular nootropics and related compounds with nootropic properties that contribute to cognitive enhancement. Beneath each nutrient, supplement or drug you will find a brief description of its chemical classification, mechanisms of action and effects on the brain. You will also find user ratings for each of these compounds in terms of their effects on Memory, Focus and Mood. You can also click on each nootropic’s name below to learn more about any substance on this list.
Racetams

Racetams are the founding class of Nootropics, based on derivatives of Piracetam. In addition to this archetype, they include Aniracetam, Oxiracetam, Pramiracetam, Phenylpiracetam, Nefiracetam, Coluracetam and others. They share similar chemical structures based on a 2-pyrrolidone nucleus composed of oxygen, nitrogen, and hydrogen. Many of the effects of Racetams are similar as they related to improving brain health, learning, memory and focus. But there is also great diversity within this class in terms of potency and individual characteristics of the supplements listed below. All Racetams seem to be able to increase acetylcholine neurotransmitter activity in the brain and some are also capable of increasing glutamate activity via AMPA and NMDA receptors.

Piracetam

Piracetam – also known as 2-oxo-1-pyrrolidine acetamide – is a cyclic derivative of the neurochemical GABA. This original nootropic is a positive modulator for receptors of the acetylcholine neurotransmitter which plays a role in fluid intelligence and short-term working memory capacity. Piracetam is also believed to improve the membrane permeability of neurons which enhances overall neuronal function as it relates to communication, healthy development and synaptic plasticity. This nootropic is reported by users to improve focus, attentiveness, memory formation and recall, information processing as well as several factors related to mood. It is used as an off-label ADHD treatment and remains to this day the most popular nootropic among first-time users.

Other Names: Nootropil, Nootropy, Nooracetam

Memory: ★★★★★☆ Focus: ★★★★☆☆☆☆ Mood: ★★★★☆☆☆☆
Aniracetam

Aniracetam – (1(4-methoxybenzoyl)-2-pyrrolidinone) – is a derivative of Piracetam that is said to be 5x more potent than its parent compound. Unlike Piracetam, it is fat-soluble which may contribute to its faster onset of effects as well as a shorter half-life. It shares the common Racetam effects of enhancing memory and focus by activating Nicotinic Acetylcholine receptors in the brain. It also stimulates AMPA receptor sites which are implicated in learning as well as memory encoding processes. This unique mechanism of action has made Aniracetam the model for another class of nootropics known as AMPAkines. Finally, it is believed to activate D2 and D3 Dopamine receptors as well as the 5-HTP(2a) receptor involved in Serotonin processing. This explains why user reviews say Aniracetam is effective as an anti-anxiety and anti-depression treatment in addition to its traditional nootropic benefits.

Other Names: Memotropil, Memodrin, Ampamet, Draganon, Referan

Memory: ★★★★★ ★★★★☆ ★★★★☆

Oxiracetam

Oxiracetam – (RS)-2-(4-hydroxy-2-oxopyrrolidin-1-yl)acetamide – is both a Racetam and an Ampakine that is said to be 4-6 times stronger than Piracetam. It increases brain activity in cholinergic and glutamatergic pathways and exhibits some stimulant-like effects. Oxiracetam is particularly noted for improving reasoning, verbal processing, spatial learning, logical and mathematical thinking as well as focus and memory. These attributes are highly correlated with the g-factor of intelligence and Oxiracetam – more than any other Racetam – is described as boosting intellectual function. It is commonly used as a study aid among students in highly technical subjects such as the STEM (Science, Technology, Engineering, Math) fields.

Memory: ★★★★★ ★★★★☆ ★★★★☆
Pramiracetam

Pramiracetam – N-[2-(diisopropylamino)ethyl]-2-(2-oxopyrrolidin-1-yl)acetamide – is a Piracetam analogue that is 30x more potent. It influences both Glutamate and Acetylcholine neuroreceptors and particularly increases reuptake at ACh receptor sites as well as increasing the efficiency of nerve impulse channels in the hippocampus. This region of the brain is implicated as having a central role in memory formation as well as recall. Using Pramiracetam produces a great sense of mental clarity and concentration while also improving critical thinking skills and the speed of information processing. Individuals typically take Pramiracetam to improve their memory retention while enabling them to be more productive, attentive, focused and alert.

Other Names: Pramistar

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★

Noopept

Noopept – N-Phenylacetyl-L-prolylglycine ethyl ester – is not technically a Racetam, though it is derived from this class and use a similar mechanisms of action. It has a different chemical structure which technically makes it a neuropeptide, said to be over 1000x times more concentrated than Piracetam. The effective dosage for Noopept powder is between 10 – 40 mg which is exceptional small in comparison to other Racetams. Noopept demonstrates very high affinity for ACh, AMPA and NDMA receptors that relate to short-term and long-term memory. Like Aniracetam, it also activates D2 and D3 receptors for Dopamine as well as selective Serotonin receptors. These systems are involved in mood and motivation which is why Noopept is seen as being effective for disorders such as depression and anxiety. Noopept further increases Nerve Growth Factor levels which is a hormone involved in the maintenance and repair of healthy brain cells. It is being investigated as a possible treatment for Alzheimer’s disease and other neurodegenerative disorders including Age-Related Memory Loss.

Other Names: Neuropept

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★
**Phenylpiracetam**

Phenylpiracetam – (RS)-2-((2-oxo-4-phenylpyrrolidin-1-yl)acetamide – was synthesized by adding a phenyl group molecule to Piracetam’s chemical structure. This alteration has made it significantly more bioavailable than its progenitor and with a 60x greater potency. It is a positive modulator of acetylcholine and glutamate synaptic receptors and may be able to increase the density of hippocampal NMDA receptors. These receptors are integral to the process of Long-Term Potentiation which is how memories are stored as connections between neurons. Phenylpiracetam also raises Dopamine and Noradrenalin levels in the brain which gives it both mood-enhancing and mentally stimulating properties. It is described as producing intense focus, mental drive and motivation while also enhancing memory consolidation and physical performance.

*Other Names:* Carphedon, Phenotropil

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**Coluracetam**

Coluracetam – N-(2,3-dimethyl-5,6,7,8-tetrahydrofuro[2,3-b]quinolin-4-yl)-2- (2-oxopyrrolidin-1-yl)acetamide – is a Racetam compound with 10-20x the potency of Piracetam. It works by increasing the uptake of choline into neurons which leads to an increase in acetylcholine levels and Cholinergic activity. Coluracetam is believed to show a distinct ability to improve Choline uptake in damaged neurons and may offer long-term benefits for memory-impaired individuals. It also influences areas of the brain that are involved in visual processing and is said to improve eyesight and color perception. Other studies have shown it to be effective in treating General Anxiety Disorder as well as depression.

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Nefiracetam

Nefiracetam – N-(2,6-dimethylphenyl)-2-(2-oxopyrrolidin-1-yl)acetamide – is a Racetam with a similar chemical structure to Aniracetam. It is believed to increase brain activity by potentiating excitatory neurotransmission through prolonging the opening of calcium channels. It also binds to nicotinic Acetylcholine receptors and enhances communication in GABAergic, Cholinergic, monoaminergic and glutamatergic neuronal systems. Nefiracetam is highly cytoprotective and may be able to treat individuals suffering from cognitive decline as well as Alzheimer’s and cerebrovascular dementia. Trials have found it to be more effective for increasing attention span, concentration, memory function, and spatial learning ability compared to other Racetams. It is also considered to be a more powerful anxiolytic than Aniracetam and was shown to be successful in the treatment of clinical depression.

Memory: ★★★★★ Focus: ★★★★ Mood: ★★★★☆☆☆

Cholinergics

The Cholinergic system refers to those components of the nervous system that use the neurotransmitter acetylcholine to communicate. Acetylcholine (ACh) is an excitatory brain chemical that is involved in many facets of mental function such as attention, synaptic plasticity, wakefulness, and the reward system. Increasing cholinergic activity may lead to improved focus, working memory, alertness, mental clarity and performance across a number of intelligence measurements. Cholinergic Nootropics are able to increase stimulation of ACh receptors either by raising levels of acetylcholine, preventing the degradation of this neurotransmitter, or by potentiating or activating these receptors in some way. A direct way to increase acetylcholine levels is by consuming more Choline which is a dietary nutrient used to synthesize this transmitter.
Choline

Choline – 2-hydroxy-N,N,N-trimethylmethanaminium – is a water-soluble essential nutrient that was recently named to the B-complex family of vitamins. It is necessary for the development and maintenance of health brain cell membranes to ensure effective signalling, structural integrity and neuronal fluidity. This nutrient is also used alongside acetic acid to synthesizes acetylcholine in neurons. Sources of choline are commonly used alongside the Racetams in nootropic stacks due to their complimentary mechanisms of action. The American Institute of Medicine recommends that adults get at least 425 – 550 mg of choline in their diets every day. However, as much as 90% of the population is estimated to be deficient in this nutrient. Increasing choline intake by eating foods such as eggs, chicken, soy lecithin, wheat germ and cod fish may improve mental performance and prevent age-related cognitive decline. Not all choline sources are made equally and as much as 50% of the choline we eat may be degraded by bacteria in the gut. Some choline supplements marketed today are known to have very low bio-availability with only a small percentage able to cross the blood-brain barrier.

Memory: ★★★★☆ Focus: ★★★★☆ Mood: ★★★☆☆

Alpha GPC

Alpha GPC – [(2S)-2,3-Dihydroxypropyl] 2-trimethylazaniumylethyl phosphate – is a source of choline derived naturally from soy lecithin. It also occurs naturally in the brain as well as in human breast milk and may be a contributing factor to the higher IQ observed in children that have been breast-fed. It has the highest bio-availability of the nootropic Choline supplements and readily crosses the blood-brain barrier. Once in the brain, it is metabolized into acetylcholine which can then be used for inter-neuronal communication related to short-term memory, learning and attention. Alpha GPC can also slow the process of brain aging as a cognitive anti-oxidant and it is observed to increase Human Growth Hormone levels. Individuals who use Alpha GPC say that it improves memory performance, eliminates brain fog and improves focus.

Other Names: Alpha Glycerylphosphorylcholine, Choline Alfoscerate, GPC Choline

Memory: ★★★★☆ Focus: ★★★★☆ Mood: ★★★☆☆
Citicoline

Citicoline – 5’-O-[hydroxy{[hydroxy[2-(trimethylammonio)ethoxy]phosphoryl}oxy]phosphoryl]cytidine – is an acetylcholine precursor with high bioavailability that occurs naturally as an intermediary in the conversion of choline into phosphatidylcholine in the liver. Phosphatidylcholine is a phospholipid that is incorporated into neuronal cell membranes and can be used in acetylcholine synthesis. Citicoline increases the availability of choline in the brain by freeing up quantities of choline that would otherwise be used in the generation of phosphatidylcholine. It can therefore indirectly increase acetylcholine levels while also improving cell membrane function in neurons and preventing depletion of phospholipids which can lead to brain damage and mental decline. This supplement also protects against oxidative stress, reduces inflammation in the cerebral cortex, and stimulates the release of dopamine in the brain. It is an effective component of nootropic stacks designed to enhance memory, thinking, concentration and mood.

Other Names: CDP Choline, Cytidine Diphosphate Choline

Memory: ★★★★★ ★★★★★ ★★★★★

Centrophenoxine

Centrophenoxine – 2-Dimethylaminoethyl (4-chlorophenoxy)acetate – is an ester of DMAE with a higher bio-availability. DMAE is sometimes used as a choline source, however new studies show that it is not as effective as was once believed. Centrophenoxine appears much more effective for raising acetylcholine levels because it is better able to cross the Blood-Brain barrier. Research suggests Centrophenoxine may improve mood and ADHD via cholinergic, dopaminergic and serotonergic pathways. It is also a potent brain anti-oxidant and is shown to reduce lipofuscin waste deposits that build up in brain cells as we age. Centrophenoxine is highly synergistic with Racetams in memory-enhancement nootropic stacks and will also boost focus, clarity of thought, mood as well as brain health.

Other Names: Lucidril, Meclofenoxate

Memory: ★★★★★ ★★★★★ ★★★★★
Choline Citrate

Choline Citrate is a supplemental combination of Choline with Citric Acid that you may find marketed in brain supplements. As a source of choline, it can increase available levels of acetylcholine in the brain which supports better memory function and reasoning as well as improved synaptic plasticity. However, this formulation is considered to have low bioavailability and lacks the added nootropic benefits of supplements such as Citicoline and Alpha GPC.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★

Choline Bitartrate

Choline Bitartrate is a supplemental combination of Choline with Tartaric Acid which is a chemical salt added to improve absorption. It is a direct precursor to acetylcholine and is effective in treating a dietary choline deficiency. Studies have shown that this type of choline is significantly degraded in the digestive tract by bacteria and only a fraction will penetrate across the Blood-Brain Barrier. For this reason, nootropic users typically look to the higher quality choline sources listed above which will have a greater net impact on cognitive abilities.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★

DMAE

DMAE (2-(Dimethylamino)ethanol) is a primary alcohol which is organically manufactured by the human brain, and is also found in various food sources such as fish. DMAE is a direct pre-cursor for choline. Once it crosses the blood-brain barrier, the compound is methylated
into acetylcholine, a key neurotransmitter related to learning, memory, and brain tissue health. DMAE also binds to brain phospholipids, improving the function, nourishment, and waste removal systems of cell membranes. DMAE lifts mood, promotes mental energy, develops a sense of alert focus, and replaces stress reactions with feelings of calm. In addition to DMAE’s anti-anxiety properties, it has also been shown to reduce visible signs of aging by inhibiting arachidonic acid. DMAE contributes to healthy sleep patterns, and users report it frequently produces states of lucid dreaming.

Other Names: Deanol, DMAE Bitartrate, Dimehylaminoethanol

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**Lecithin**

Lecithin is a natural fat compound composed of phosphoric acid, choline, fatty acids, glycerol, glycolipids, triglycerides, and phospholipids. Lecithin assists in breaking down other fats and transporting them throughout the body. It also acts as a direct pre-cursor to the neurotransmitter acetylcholine. Acetylcholine promotes memory formation, neural structure health, and reasoning skills. Lecithin is also a powerful anti-oxidant which keeps cells healthy by removing toxins and fighting free radical damage. Lecithin is an effective memory-booster, and can provide neuro-protective benefits against degenerative disorders like dementia and Alzheimer’s disease well into old age. It can also moderately enhance various other cognitive functions, such as managing depression and anxiety symptoms. Due to low bio-availability, most nootropic users prefer other choline supplements like Alpha GPC or Citicoline for stronger results.

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**Phosphatidylcholine**

Phosphatidylcholine (PC) is a hydrophobic lipid derived from Lecithin which incorporates choline, one of the B vitamins. In addition to assisting in fat metabolism, Phosphatidylcholine also helps maintain and repair neurons and brain cells. The choline in Phosphatidylcholine is a key mental health nutrient which is the pre-cursor to acetylcholine.
in the brain. Acetylcholine helps promote the development of synapses between neurons and improves communication in both healthy and aging minds. Phosphatidylcholine improves metabolism, lowers cholesterol and protects the liver against disease. Taken as a nootropic, it enhances the formation and easy retrieval of memories. Its ability to foster new growth of synapses makes it a powerful neuroprotective supplement and a possible therapy for Alzheimer’s disease. Alpha Glycerylphosphorylcholine is a stronger nootropic alternative to this nutrient.

**Memory:** ★★★★★  **Focus:** ★★★★★  **Mood:** ★★★★★

### Acetylcholinesterase Inhibitors

Acetylcholinesterase Inhibitors are a class of compounds that restrict the action of the enzyme acetylcholinesterase. This enzyme, if left unchecked, will break down and reduce the amount of acetylcholine in the brain. Acetylcholine is a powerful neurotransmitter which is essential to various cognitive functions. It promotes learning, improves logical and verbal reasoning, enhances memory formation, increases sensitivity to stimuli, and spurs the healthy growth of neural structures. Nootropic acetylcholinesterase inhibitors allow for safe increases in the available levels of this neurotransmitter. The benefits of acetylcholinesterase inhibitors include immediate gains in memory and learning functions, as well as long term neuro-protective benefits, such as the prevention of Alzheimer’s disease.

### Galantamine

Galantamine is a medicinal alkaloid which is derived from the leaves of the Galanthus Caucasius plant. It is traditionally prescribed for sensory and motor disorders like myasthenia. Galantamine regulates enzyme activity in the brain. As an acetylcholinesterase inhibitor, Galantamine maintains levels of the neurotransmitter acetylcholine. It also activates the brain’s nicotinic receptors, making them better able to process acetylcholine and other neurochemicals. User benefits include improved memory function, better
reasoning ability, and enhanced reaction sensitivity to stimuli. Galantamine has shown promise as a therapy for and protection against the severe cognitive decline related to aging, such as in cases of Alzheimer’s disease.

Huperzine A

Huperzine A is an organic sesquiterpene alkaloid compound, found in Huperzia Serrata moss, which has been used as treatment for Alzheimer’s disease. Huperzine A enhances the ability of neurons to communicate with one another, through increased synaptogenesis. Huperzine is also an NMDA receptor antagonist. Through this action, it promotes the growth of nerve cells via the production of Nerve Growth Factor. Huperzine A is an acetylcholinesterase inhibitor, meaning it prevents the breakdown of the key neurotransmitter acetylcholine in the synaptic cleft of the brain. The resulting raise in acetylcholine levels promotes better memory function, enhanced learning, and stronger mental focus. Huperzine A also exhibits many neuro-protective qualities, resulting in improved plasticity of brain cells.

Huperzia Serrata

Huperzia Serrata is a Southeast Asian fir moss plant which is the organic source of the alkaloid Huperzine A, a powerful memory-boosting nootropic. Huperzine A’s main nootropic effect is as an acetylcholinesterase inhibitor. This compound from Huperzia Serrata prevents an enzyme from braking down acetylcholine once it is released in the brain. It maintains healthy levels of this important neurotransmitter and leads to greater stimulation of cholinergic receptors. This action improves short term memory function and long term memory formation, and can be a potent therapy for memory deficits that accompany age-related disorders like Alzheimer’s disease. Huperzia Serrata is also a powerful anti-oxidant and can reduce oxidative stress in cholinergic neurons, boosting the
effectiveness of choline in the body and leading to more pronounced cognitive enhancements.

Memory: ⭐⭐⭐⭐⭐ | Focus: ⭐⭐⭐⭐⭐ | Mood: ⭐⭐⭐⭐⭐

Ampakines

Ampakines are a class of compounds which activate glutamatergic AMPA receptors in order to promote alertness, mental energy, greater attention span, and memory. AMPA receptors are responsible for regulating synaptic transmission. By interacting with these receptors, Ampakines create stimulant effects as well as nootropic benefits, without traditional stimulant side effects. By enhancing this synaptic communication, Ampakines promote the growth of neurons and the formation of long term memories. This action creates a sense of mental focus which can be of enormous therapeutic value to patients with hyperactivity disorders like ADHD. Ampakines such as Sunifiram and Unifiram, considered the strongest among the entire class of compounds, can even be used to treat and protect against degenerative mental disorders associated with aging like Alzheimer’s disease and dementia.

Sunifiram

Sunifiram (1-benzoyl-4-propanoylpiperazine) is an AMPA agonist and a member of the Ampakine class of compounds. It is known to deliver similar yet vastly more potent effects as Piracetam and is cited as 1000x stronger than this original Racetam. Sunifiram activates AMPA receptors, firing synaptic growth and facilitating communication between neurons. This produces dramatic memory and learning effects as well as powerful stimulant-like effects. For this reason, it is often effectively taken to alleviate symptoms of ADHD. Sunifiram does not however carry any of the typical side effects associated with stimulant drugs like Adderall. Sunifiram benefits include powerfully sharpened mental focus, heightened concentration, motivation and ambition.

Memory: ⭐⭐⭐⭐⭐ | Focus: ⭐⭐⭐⭐⭐ | Mood: ⭐⭐⭐⭐⭐
Unifiram

Unifiram (alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid) is an Ampakine compound which positively modulates AMPA receptors. Unifiram encourages strong communication between neurons by stimulating glutamate synaptic receptors. It also stimulates production of acetylcholine. Higher levels of both glutamate and acetylcholine facilitate better brain health and improved signaling. This translates into benefits for memory formation and retrieval, heightened concentration, better reasoning abilities, and a powerful state of alert energy. Attention span is heightened, especially when a cognitive hyperactivity imbalance such as ADHD is present. Unifiram has energizing stimulant-like effects without the jittery side effects associated with caffeine or Ritalin.

Memory: ★★★★★☆  Focus: ★★★★★☆  Mood: ★★★★★☆

Ampalex

Ampalex (CX-516) is an Ampakine compound nootropic. Ampalex is able to cross the blood-brain barrier and stimulate AMPA receptors. These receptor sites control communication between neurons across synapses, and once Ampalex binds with them, signaling is dramatically enhanced. Ampalex is also an NMDA agonist for the neurotransmitter glutamate which communicates excitatory transmissions between synapses. Overall, Ampalex use leads to better concentration and mental focus. While its half-life is too short to be considered for use as an Alzheimer’s therapy, Ampalex can create dramatic memory effects in healthy minds, in addition to very stimulating effects like mental alertness and physical energy.

Other Names: CX-516

Memory: ★★★★★☆  Focus: ★★★★★☆  Mood: ★★★★★☆
Smart Drugs

A smart drug is any natural or synthetic pharmaceutical or nutraceutical that is consumed for the purpose of improving cognitive functions. These functions include memory, reasoning ability, mental focus, or motivation. Smart drugs, sometimes also referred to as cognitive enhancement agents, interact with natural neurochemicals, such as hormones, enzymes, and neurotransmitters. Individual physical processes and reactions are impacted according to the specific chemistry of each medication. These types of drugs can be of great benefit for symptoms related to serious cognitive disorders like ADHD, anxiety, or even Alzheimer’s disease and Parkinson’s disease. For healthy minds, smart drugs can provide a substantial boost to normal thinking, learning, memory, and focus. Smart Drugs are typically considered as separate from nootropics since they may use stimulatory mechanisms of action and may carry a greater risk of side effects.

Adrafinil

Adrafinil ((RS)-2-benzhydrylsulfinylethanehydroxamic acid) is a part of a class of drugs known as eugeroics. These compounds foster wakefulness and alert mental states, but do not carry the side effects of common psychostimulants. Adrafinil affects the adrenergic system by stimulating catecholamine hormones, like epinephrine, norepinephrine, and dopamine. Not only do these hormones create fight or flight responses in the body, they also promote heightened attention span, motivation, and mental stamina. Adrafinil is the pre-cursor to Modafinil in the body. While it has previously been formally prescribed as a treatment for narcolepsy, Adrafinil has gained popularity as a nootropic supplement for improving cognitive function and fostering intense concentration abilities in users. It is available in the United States without a prescription, making it a popular alternative to Modafinil and Armodafinil.

Other Names: Olmifon

Memory: ★★★★★ ★★★★★  Focus: ★★★★★ ★★★★★  Mood: ★★★★★ ★★★★★

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Modafinil

Modafinil (2-[(diphenylmethyl) sulfinyl] acetamide) is a eugeroic compound which is sold as a prescription wakefulness and vigilance drug. Modafinil is a central nervous system stimulant, also known as an analeptic drug. It stimulates the release of CNS histamines to promote wakefulness. The drug is primarily prescribed for patients with severe sleep disorders, such as narcolepsy, shift work sleep disorder, or obstructive sleep apnea. For healthy nootropic users without these conditions, Modafinil can promote a state of intense concentration and mental focus, making detail-orientated time intensive tasks easy to perform at peak productivity. While powerful states of mental acuity are generated, normal sleep cycles are typically not interfered with, making this compound popular with students and businesspeople alike. Modafinil was depicted in the movie “Limitless” as the fictional drug NZT-48.

Other Names: Provigil, Modiodal, Modvigil, Modasomil, Vigicer, Alertex, Modapro, Modalert

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★

Armodafinil

Armodafinil ((−)-2-[(R)-(diphenylmethyl)sulfinyl]acetamide) is a derivative form of the eugeroic drug Modafinil, known as an enantiopure variation. This stronger and more potent form of the wakefulness drug is created by isolating the right enantiomer of Modafinil’s molecular isomers, and is considered to be purer and more potent. Armodafinil boosts CNS histamine levels to create arousal in the central nervous system. This response triggers fight or flight reactions including heightened awareness of sensory stimulus, greater mental acuity, and elevated heart rate. While stimulating, these effects do not interfere with normal sleep cycles. These benefits are considered “off-label,” as Armodafinil is technically only prescribed for patients with sleep disorders like narcolepsy or sleep apnea. Taken as a nootropic supplement, Armodafinil can promote intensely heightened concentration and the ability to work and study with maximum efficiency and focus.

Other Names: Nuvigil, Waklert

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★
Adderall

Adderall (Ampheta S/Combo) is a prescription psychostimulant drug which combines amphetamine and dextroamphetamine salts. Adderall stimulates the adrenergic system and activates the catecholamine hormones to trigger the spiked release of neurotransmitters like Norepinephrine, Dopamine, and Serotonin. This action creates a heightened state of mental focus and concentration. Adderall is widely prescribed to bring mental balance to sufferers of hyperactivity disorders like ADD and ADHD, especially but not limited to children. Its stimulating effects can also promote wakefulness, significant appetite suppression, weight loss and a sense of euphoria. As an amphetamine, Adderall does come with some major side effects including possible heart problems and serious dependency risk.

Other Names: Ampheta

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★☆

Ritalin

Ritalin (Methylphenidate) is a prescription psychostimulant medication and smart drug which affects the central nervous system. Ritalin’s main mechanism of action is preventing the re-uptake of dopamine, a powerful neurotransmitter responsible for mental energy and sensations of motivation and desire. In addition to blocking the proteins which cause the absorption of dopamine, Ritalin also enhances the function of neurons in the prefrontal cortex of the brain. This area is known to relate to impulse control, motivation, and mental clarity. While Ritalin is primarily prescribed for people suffering from attention disorders like ADD and ADHD, its off-label benefits include improved mental focus, reduced lethargy, and weight loss from enhanced metabolism.

Memory: ★★★★★☆ Focus: ★★★★★☆ Mood: ★★★★★☆
Cylert

Cylert ([(RS)-2-amino-5-phenyl-1,3-oxazol-4(5H)-one]) is an oxazoline stimulant drug designed for the treatment of narcolepsy and ADHD. This drug has been classified as a Schedule IV narcotic and is no longer easily available to the public. Cylert impacts the central nervous system by imitating the effects of dopamine, a characteristic known as dopamimetic. While not affecting actual levels of dopamine, it is able to stimulate many of dopamine’s functions in the brain, including heightened energy and mental focus. It also has been shown to be a catalyst conductor in the brain. This means it increases the speed of memory formation and access, while dramatically lengthening attention span and concentration. In light of serious side effect concerns, the FDA has recently issued directives asking physicians not to prescribe this medication to children suffering from ADHD.

Other Names: Pemoline

| Memory: | ★★★★★ | Focus: | ★★★★★ | Mood: | ★★★★★ |

GABAergics

The class of GABAergic nootropics include any compounds which interact with GABAergic neurons in the brain. GABA is a neurotransmitter that has a naturally inhibitory effect on stress responses in the central nervous system. GABA (Gamma-Aminobutyric Acid) works to eradicate the over-firing of nerves, thus neutralizing stress and anxiety reactions before they happen. It does this by binding with receptor sites before they can be activated by stress-induced neurotransmitters. GABAergics have a calming, anxiolytic effect. They are known to promote feelings of balanced emotion and tranquility in users. They are also widely used to promote rest and proper sleep cycles, especially for people who experience insomnia.
**GABA**

GABA (short for Gamma-Aminobutyric Acid) is an essential amino acid derived from Vitamin B6 and Glutamate in the brain. GABA is an inhibitory neurotransmitter, which means it blocks the effects of other excitatory neurochemicals. GABA binds to neurotransmitter receptor sites and prevents signaling of stress reactions. When consumed as an oral dietary supplement, GABA cannot cross the blood-brain barrier, so direct supplementation of the compound is largely useless for anxiolytic stress relief. Instead, one can increase levels of GABA within the brain by consuming precursors of this substance. GABA activity can also be activated by using GABAergic supplements that have similar mechanisms of action and promote a deeply calming effect. These supplements have powerful anti-anxiety and anti-depressive effects, which can also promote healthy sleep cycles.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★

**Phenibut**

Phenibut (\(\alpha\)-Phenyl-\(\beta\)-aminobutyric acid) is a derivative form of GABA, also known as \(\beta\)-aminobutyric acid. GABA is a key inhibitory neurotransmitter which balances stress signals in the brain by binding to receptor sites before other stress hormones can. GABA is not able to cross the blood-brain barrier and is thus difficult to supplement with. However, Phenibut is fully bioavailable, and is able to directly stimulate both GABA-A and GAAB-B receptors non-selectively. The resulting benefits for users involve a reduction of stress and anxiolytic (anti-anxiety) effect. Phenibut contributes to a state of mental calm and tranquility, while enhancing brain communication across hemispheres and improving sleep. It must be used properly to avoid side effects as well as withdrawal and tolerance concerns.

Other Names: Noofen

Memory: ★★★★☆  Focus: ★★★★☆  Mood: ★★★★☆
Picamilon

Picamilon (4-(Pyridine-3-carbonylamino)butanoic acid), also referred to as nicotinoyl-GABA, is a nootropic supplement made from niacin and GABA. GABA is the key inhibitory neurotransmitter in the body. It exerts powerful calming effects by preventing stress reactions due to over-excited neural activity. GABA is unable to cross the blood-brain barrier on its own, so this supplement incorporates bioavailable Niacin as an effective delivery device. Niacin also has vasodilation effects, increasing circulation and delivering more oxygen and nutrients to the brain. By preventing nerves from over-firing due to stress, Picamilon promotes a sense of peaceful relaxation. It increases mental clarity and emotional balance, and its sedative effects can also enhance natural sleep patterns. Picamilon also has excellent anti-oxidant effects, ridding the brain of toxins and increasing blood flow. The result is natural anxiety relief and heightened mental focus.

| Memory: | ★★★★☆ | Focus: | ★★★☆☆ | Mood: | ★★★★☆ |

Seretanergics

Seretanergics are a class of compounds which relate to the neurotransmitter serotonin and enhance its natural effects in the body. This category includes serotonin pre-cursors such as 5-HTP, serotonin receptor agonists, serotonin reuptake inhibitors, monoamine oxidase inhibitors (MAOIs), serotonergic enzymes, tricyclic antidepressants, and noradrenergic antidepressants. Each compound works to either boost or suppress serotonin activity in order to achieve its effects. Serotonin is the neurotransmitter which is related to proper nerve impulse, mood, pleasure, and the ability to handle stress. Seretanergics can balance emotions, fight depression, and promote general feelings of well-being.
Tryptophan

Tryptophan ((2S)-2-amino-3-(1H-indol-3-yl)propanoic acid) is an amino acid produced by the body and found in food sources like nuts, oats, eggs, soybeans, and poultry. Once consumed, it crosses the blood-brain barrier and acts as a pre-cursor to the neurotransmitter serotonin, a key regulator of mood. Tryptophan is also a building block for Melatonin, a natural hormone which is connected to circadian sleep rhythms. Finally, some Tryptophan is converted into Niacin and Auxin, vitamins and phytohormones important in brain health. Tryptophan is a powerful anxiolytic and anti-depressant, lifting mood and generating emotional balance. It can assist in weight loss by reducing appetite. Tryptophan also is a valuable component of liver health, used as a treatment for steatohepatitis.

5 HTP

5-HTP (5-Hydroxytryptophan) is the intermediate product of Tryptophan metabolism, produced naturally by the human body. 5-HTP is the direct chemical pre-cursor to serotonin, a mood-regulating neurotransmitter which is otherwise unable to cross the blood brain barrier via supplementation. 5-HTP delivers serotonin to the brain, where it can assist in the prevention of anxiety and promotion of pleasurable moods and sleep. Some 5-HTP is also converted into melatonin in the brain, another hormone related to sleep cycles. 5-HTP has strong anti-anxiety and stress-relieving qualities, and promotes overall mood enhancement. It is frequently used to restore serotonin levels in depression patients. It is also taken to counter insomnia and promote healthy sleep patterns.
**Griffonia Seed Extract**

Griffonia Seed Extract is a plant-based supplement derived from the Griffonia Simplicifolia plant. The extract contains 5-HTP (5-Hydroxytryptophan), a metabolite of Tryptophan. The liver converts Griffonia Seed Extract directly into 5-HTP, which then becomes the pre-cursor to the neurotransmitter serotonin — a regulator of mood and rest states. 5-HTP also converts into the hormone melatonin, another regulator of healthy sleep cycles. When using this mood enhancer, dopamine levels are reduced, which actually improves the performance of serotonin. Griffonia Seed Extract is taken to relieve symptoms of anxiety and promote relaxation and feelings of happiness. Griffonia is a known stress fighter, providing clarity and mental focus which is valuable to patients with ADHD. It also cuts appetite to assist in weight loss.

**Memory: ★★★★★**  
**Focus: ★★★★★**  
**Mood: ★★★★★★**

**Dopaminergics**

Dopaminergics are a category of compounds which are known to have an impact upon dopamine levels and activity in the brain. Dopaminergics include dopamine-regulating enzymes like aromatic L-amino acid decarboxylase, DOPA decarboxylase, and monoamine oxidase inhibitors (MAOIs). These compounds work by regulating the metabolism and synthesis of dopamine, and are often direct pre-cursors to dopamine. Dopaminergics are used to treat severe dopamine deficiency disorders like Parkinson’s disease, schizophrenia, and bipolar disorder. They may also be effective treatments against symptoms of ADHD, anxiety, and depression. Dopaminergics are sometimes used as therapy for sexual dysfunction in both men and women. These compounds are known for providing natural mental and physical energy, while heightening alertness and motivation and concentration.
Sulbutiamine

Sulbutiamine is a bioavailable lipophilic compound derived from twin molecules of Vitamin B1 (Thiamine). Sulbutiamine increases the amount of Thiamine esters in the brain. It boosts cellular metabolism and improves nerve signaling in the central nervous system. Sulbutiamine is a more potent variation of Vitamin B1, which contributes to the overall health of neural tissues. Sulbutiamine is taken to increase energy, boost mental clarity, improve recall, and enhance working memory capacity. It is popular with students, who use the supplement for the motivation to overcome procrastination. Sulbutiamine is also an effective anxiolytic, known to reduce social anxiety and promote overall feelings of well-being and happiness.

Other Names: Arcalion

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★☆

DL-Phenylalanine

DL-Phenylalanine (DPLA or 2-Amino-3-phenylpropanoic acid) is a non-polar amino acid which is the basis for protein production in the body. It is a direct chemical pre-cursor to the amino acid tyrosine, as well as the important neurochemicals dopamine, norepinephrine, and epinephrine. DL-Phenylalanine also binds to AMPA receptors, sites connected to the regulation of alert energy. The compound inhibits the protein enkephalinase, which is connected to sensations of physical pain. DL-Phenylalanine benefits include analgesic pain relief, enhanced mood, and overall increases to mental energy. It creates heightened mental focus and concentration, and for this reason may be an effective treatment for ADHD patients.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★☆
**Tyrosine**

Tyrosine (4-hydroxyphenylalanine) is an organic amino acid produced in the human body, which is also contained in food sources like poultry, fish, nuts, dairy, avocados, and bananas. Once it crosses the blood-brain barrier, it is converted into the neurochemicals dopamine, epinephrine, and norepinephrine. Tyrosine also helps maintain adrenal, pituitary, and thyroid glandular health. Overall, Tyrosine boosts the efficiency of nerve transmissions throughout the central nervous system. Tyrosine is an effective stress-reliever and is known to enhance mood. It is frequently taken to increase ambition and motivation, as well as to increase libido. Tyrosine also assists in weight loss through appetite suppression.

**Other Names:** N-Acetyl L-Tyrosine

**Memory:** ⭐⭐⭐⭐⭐  **Focus:** ⭐⭐⭐⭐⭐  **Mood:** ⭐⭐⭐⭐⭐

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**Phenylethylamine**

Phenylethylamine (2-phenylethanamine or PEA) is an organic monoamine alkaloid derived from the amino acid Phenylalanine. It is also found in chocolate. Phenylethylamine stimulates the release of dopamine and norepinephrine. The compound further amplifies both the stimulant-like and psychoactive effects of these neurotransmitters by blocking their chemical re-uptake. Phenylethylamine creates a natural mood-lifting high that is often compared to the feeling of falling in love. It is commonly referred to as “The Love Drug” due to these effects. It can raise heart rate and inspire other “fight or flight” responses. Phenylethylamine also stimulates production of acetylcholine, the neurochemical connected to improved memory, sharper thoughts, and neuro-protective brain tissue longevity.

**Memory:** ⭐⭐⭐⭐⭐  **Focus:** ⭐⭐⭐⭐⭐  **Mood:** ⭐⭐⭐⭐⭐
L-Dopa

L-Dopa (L-3,4-dihydroxyphenylalanine) is an organic amino acid which occurs naturally in the human body, derived from L-Tyrosine through biosynthesis. L-Dopa is a pre-cursor to the catecholamine hormones, which include epinephrine, norepinephrine, and dopamine. L-Dopa also stimulates the release of human growth hormone (HGH) within the hypothalamus and pituitary gland. L-Dopa is frequently taken to boost testosterone levels and build lean muscle. It has powerful anti-aging properties, and can replenish important neurochemicals that dwindle with age. It improves mood, mental energy, and alertness. L-Dopa has been suggested as a viable treatment for Parkinson’s disease and other age-related degenerative neurological disorders connected to low dopamine levels.

Memory: ★★★★★ Focus: ★★★★★★ Mood: ★★★★★★

Mucuna Pruriens

Mucuna Pruriens, also known as cowitch or the velvet bean, is a rainforest plant which has long been used as a staple of Ayurvedic medicine. Mucuna Pruriens is a source of L-Dopa, a compound which stimulates the release of catecholamine hormones dopamine, epinephrine, and norepinephrine. L-Dopa also generates the release of HGH (human growth hormone) in the pituitary gland and hypothalamus. It is also a powerful antioxidant. Mucuna Pruriens supplements are taken to enhance mood and increase mental alertness. It is a natural energy booster which provides instant motivation, and is also taken to increase libido. The supplement is thought to increase alpha waves, generating heightened focus and concentration.

Memory: ★★★★★ Focus: ★★★★★★ Mood: ★★★★★★
Theanine

Theanine (gamma-glutamylethylamide) is a type of L-glutamic acid which is produced in green tea (Camellia Sinensis) and some mushrooms. This relative of glutamate is a precursor to serotonin, and stimulates higher levels of dopamine. It works to inhibit over-stimulation in neurons and regulate healthy oxygen levels in brain tissue. It is also a potent anti-oxidant. L-Theanine supplements can create an overall feeling of well-being, generating a sense of tranquility, contentedness, and optimism. Theanine has powerful circulatory effects, which it creates through the release of nitric oxide, a vasodilator. It improves circulation, lowers cholesterol reduces blood pressure, and lowers the risk of cardiovascular disease. L-Theanine is commonly used in a nootropic stack with caffeine to balance some of the potential side effects like anxiety and restlessness caused by this stimulant.

Memory: ★★★★★★ Focus: ★★★★★☆ Mood: ★★★★★★

Suntheanine

Suntheanine is a biosynthetic derivative of an amino acid found in green tea. It is considered a more pure form of L-Theanine,. Suntheanine, able to cross the blood-brain barrier, is known to elevate the effectiveness of GABA in the brain. GABA is an inhibitory neurotransmitter which restricts the over-firing of neurons and slows down the brain’s reaction to stress triggers. GABA is not naturally bioavailable and cannot be supplemented on its own for this reason. Suntheanine helps activate GABA which is already present in the brain. It further increases dopamine levels in the brain. Suntheanine is most frequently taken to lift ones mood and promote feelings of tranquil peacefulness. The compound fights anxiety symptoms and generates a state of calm, mental focus. It does this in part by regulating the activity of beta waves in the brain.

Memory: ★★★★★★ Focus: ★★★★★☆ Mood: ★★★★★★
Rasagiline

Rasagiline (AGN 1135 or Azilect) is a synthetic MAOi (monamine oxidase inhibitor). Rasagiline selectively targets MAO type B. MAO-B is known to metabolize and break down dopamine in the brain, so MAO-B inhibitors like Rasagiline are designed to help maintain dopamine levels. This effect is especially vital in cases of severe dopamine deficiency, such as in Parkinson’s patients. Rasagiline, which in some respects is chemically similar to methamphetamine, directly boosts dopamine levels. Rasagiline has been used effectively as a treatment for Parkinson’s, improving muscle control and flexibility in patients. It also preserves nerve health by regulating neurotoxins. Increased dopamine levels can also improve mood, heighten ambition and drive, improve mental focus, and fight the symptoms of depression.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★

Stablon

Stablon is a brand name version of the generic drug Tianeptine, (RS)-7-(3-chloro-6-methyl-6,11-dihydrodibenzo[c,f][1,2]thiazepin-11-ylamino). Stablon increases the amount of dopamine in the brain by accelerating absorption of serotonin. By reducing serotonin’s inhibitory effects, Stablon heightens energy and concentration. This is a unique strategy for fighting depression symptoms. Stablon increases glutamate activity and stimulates AMPA and NMDA receptors, resulting in increases in mental alertness and energy. Through glutamate, Stablon aids in the formation of long term memories, also known as Long Term Potentiation. Stablon is prescribed as an anti-depressant and can also combat social anxiety and Obsessive Compulsive Disorder (OCD). It is also being considered as a viable therapy for age-related cognitive degenerative disorders such as Alzheimer’s disease.

Other Names: Tianeptine

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★
**Deprenyl**

Deprenyl (dextro-N-propargyl-N-methylamphetamine) is a synthetic Phenethylamine compound which is prescribed as an MAO-B inhibitor. MAO-B (monamine oxidase B) is a natural chemical which specifically lowers dopamine levels in the brain. MAO-B inhibitors work to increase and maintain dopamine. While the drug is intended as a therapy for serious degenerative cognitive disorders like Parkinson’s disease, it is frequently taken as a nootropic by healthy people to raise dopamine levels. It accomplishes its effects by stimulating the dopamine neurons in the substantia nigra area of the brain. Deprenyl benefits include mood lifting, anti-anxiety, and anti-depression properties. It is neuroprotective and can increase memory and mental focus. It has shown promise as a treatment for Alzheimer’s symptoms. The drug has been tagged as a potential longevity booster, through the activation of the Nrf2 pathway.

Memory: ★★★★★
Focus: ★★★★★
Mood: ★★★★★

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**Cognitive Metabolic Enhancers**

Cognitive Metabolic Enhancers are a class of supplements which positively impact energy and metabolism of human brain cells. These effects can be created through a variety of methods, such as improved vasodilatory circulation to the brain, or improved functionality of cell membranes. These compounds increase the oxygen consumption of cells, which in turn can boost metabolism and energy production. This can further support the activity of various neurochemicals, such as dopamine, norepinephrine, epinephrine, and acetylcholine. Benefits can include mood enhancement, boosting of wakefulness and alertness, improved memory, and increases to various other cognitive functions. This category of supplements can also have powerful neuroprotective functions, enhancing the overall health of neural tissues by eliminating toxins and promoting the maintenance of brain cells.
**Acetyl L-Carnitine**

Acetyl L-Carnitine ((R)-3-Acetyloxy-4-trimethylammonio-butanoate) and commonly abbreviated as ALCAR) is an acetylated form of the compound L-Carnitine. Unlike Carnitine, Acetyl L-Carnitine is able to cross the blood-brain barrier. Once it reaches the brain, it is converted into Acetyl-COA, which binds with choline already present to become acetylcholine. Acetylcholine is a neurotransmitter closely tied to many important cognitive functions, such as the formation of memory, reasoning skills, processing of perceptual data, and the ability of neural structures to grow. Acetyl L-Carnitine is more bioavailable than non-acetylated forms of Carnitine, which cannot cross the blood-brain barrier. Acetyl L-Carnitine benefits include enhanced memory, mental alertness, and easier access to thoughts. It also has strong anti-oxidant properties.

*Other Names:* ALCAR

**Memory:** ★★★★★  **Focus:** ★★★★☆  **Mood:** ★★★★★

**Alpha Lipoic Acid**

Alpha Lipoic Acid is an anti-oxidant and fatty acid, derived from octanoic (caprylic) acid. ALA creates energy in the body through the Krebs cycle – the metabolization of carbohydrates. It further contributes to enhanced cellular energy by stimulating mitochondrial enzymes. It also potentiates the effects of vitamin E and vitamin C. Alpha Lipoic Acid is most frequently taken for its anti-aging effects. One of its main benefits is the repair of damaged neurons. It also has a strong neuro-protective qualities and can prevent this damage from happening as a result of age, injuries, or thyroid issues. When used with ALCAR< ALA has been shown to facilitate communication between neurons across synapses, generating some cognitive benefits like improved states of alertness and better memory formation.

**Memory:** ★★★★☆  **Focus:** ★★★★☆  **Mood:** ★★★★★
Creatine

Creatine (2-[Carbamimidoyl(methyl)amino]acetic acid) is a naturally occurring nitrogenous amino acid. Creatine’s primary function is to deliver energy to cells. It is also known to form lean muscle by stimulating production of ATP (adenosine triphosphate). It improves metabolism throughout the body, including in the brain. It is widely used as a physical fitness and bodybuilding supplement, which can increase energy performance during athletics. Creatine allows ADP (Adenosine diphosphate), the initiator of muscle energy, to draw more resources from already taxed reserves of its fuel, ATP (Adenosine triphosphate). Creatine benefits include enhanced strength and endurance performance in heavy athletics such as body building. It contributes to the growth of lean muscle, and protects cellular membranes from damage from toxins. Nootropic benefits can include improved concentration and focus as well as increases in mental energy.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★

Pyritinol

Pyritinol is a semi-synthetic derivative of Vitamin B6 (Pyridoxine), which is formed by connecting two Pyridoxine with two sulfur atoms. This vitamin is naturally found in poultry, chickpeas, fish, beef, and bananas. Pyritinol stimulates the absorption of choline by neurons. Once in the brain, choline is the pre-cursor to acetylcholine, one of the key neurotransmitters involved in memory and learning. Pyritinol is also a pre-cursor to dopamine, which it transforms into once it successfully crosses the blood brain barrier. Pyritinol can improve attention span, facilitate recall, elevate mood, and eliminate hangovers. It is a known anxiolytic and can reduce the perception of stress. Pyritinol also has neuroprotective qualities, guarding against premature cell death.

Memory: ★★★★☆ Focus: ★★★★☆ Mood: ★★★★☆
**Vincamine**

Vincamine is a naturally occurring monoterpenoid indole alkaloid derived from the Vinca Minor (Periwinkle) plant. Vincamine enhances cerebral circulation with peripheral vasodilation effects. Vincamine widens blood vessels to deliver oxygen and nutrient-rich blood to the brain. This enhances brain metabolism by accelerating the uptake of glucose. Vincamine further enhances brain metabolism and intracellular communication through the stimulation of ATP (Adenosine Triphosphate) production. Increased blood flow in the brain creates alert clear thoughts, enhanced mood, and lowered blood pressure. Vincamine has been shown to improve memory capability in some Alzheimer’s patients by regulating brain waves. Finally, it promotes normal sleep and wakefulness cycles by stimulating the noradrenaline nerve cluster.

**Memory:** ★★★★★  **Focus:** ★★★★★  **Mood:** ★★★★★

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**Vinpocetine**

Vinpocetine is a synthesized extract of the natural plant alkaloid Vincamine, which is found in the Vinca Minor plant. Vinpocetine is able to increase blood flow to the brain without increasing blood pressure. It does this through cerebral vasodilation, the widening of muscle cell walls of blood vessels within the brain. The resulting positive regulation of oxygen and nutrients channeled to the brain creates greater glucose production. Brain metabolism is increased, and more ATP (Adenosine Triphosphate) is released. Vinpocetine is considered to be safer than Vincamine and has largely replaced its parent compound in the supplement industry. The nootropic benefits of this herbal extract include greatly improved memory functions, stress reduction, better attention span, and increased motivation. Vinpocetine also stimulates the receptors of key neurotransmitters like dopamine, acetylcholine, and serotonin, simulating their effects in the brain without creating dangerous spikes in hormone levels.

**Other Names:** Cavinton

**Memory:** ★★★★★  **Focus:** ★★★★★  **Mood:** ★★★★★
Propionyl L-Carnitine

Propionyl L-Carnitine (PLCAR) is an amino acid which differs from Carnitine with the addition of Glycine. Glycine metabolizes into Creatine in the body. Propionyl L-Carnitine increases blood flow and is a powerful cardio anti-oxidant. It assists in weight loss by activating the carnitine palmitoyltransferase pathway, catabolizing lipids. Once it partially converts into Creatine, the supplement replenishes ADP energy stores, facilitating muscle energy and growth. Propionyl L-Carnitine’s benefits include enhanced athletic performance, weight loss, and growth of lean muscle. It can also boost mental energy, providing enhanced concentration, the ability to process thoughts faster, and stronger motivation. Its antioxidant properties assist in cellular waste removal and protect key organs from disease.

Memory: ★★★★★   Focus: ★★★★★   Mood: ★★★★☆

Nootropic Vitamins

Nootropic vitamins are organic compounds which are required for advanced cognitive function but cannot be produced in sufficient quantities by the body itself. These vitamins can support, enhance, and protect many key brain functions through the stimulation of the brain’s natural chemistry. Neurochemicals can either be increased, inhibited, or potentiated with supplement use. Neurogenesis and synaptogenesis can be enhanced, resulting in the thriving growth of brain structures and tissue. Benefits can include enhanced memory functions, focus, concentration, wakefulness, alert mental states, mood lift, and better reasoning skills. Nootropic vitamins also often provide protection against damage and decay at the cellular level. These neuroprotective qualities are especially beneficial for cases of age-related cognitive degenerative disorders.
Vitamin B1 (Thiamine)

Vitamin B1 Thiamine (2-[3-[(4-Amino-2-methyl-pyrimidin-5-yl)methyl]-4-methyl-thiazol-5-yl] ethanol) is one of the 8 B vitamins. This natural nutrient is an essential compound for all mammal life. Vitamin B1 synthesizes proteins and enzymes, and metabolizes carbohydrates. It provides cellular energy, protects tissue health, and supports nerve function. Many people take Vitamin B1 to boost overall energy in the body. It also known to lower blood pressure and make it easier to achieve healthy sleep patterns. Over time, Vitamin B1 can improve memory function, and has been used to treat the symptoms of Alzheimer’s disease. Like other B Vitamins, Thiamine is also frequently taken to help regulate stress and improve mood. The nootropic supplement Sulbutiamine is an enhanced form of Thiamine.

Memory: ★★★★★    Focus: ★★★★★    Mood: ★★★★★

Vitamin B3 (Niacin)

Vitamin B3 (Niacin) is one of the 8 B-complex family vitamins. All B vitamins create energy in the body by converting carbohydrates into glucose. Niacin also improves circulation to the brain through cerebral vasodilation. By delivering oxygen and glucose to the brain, Niacin assists in the formation of ATP, the brain’s main energy source. Niacin also prompts the adrenal glands to produce key sex and stress hormones. Vitamin B3 Niacin’s benefits include lowering bad LDL cholesterol. As a nootropic, the vitamin can increase mental focus, create a sense of natural mental energy, and make it easier to concentrate for long periods of time. The nootropic supplement Picamilon contains Niacin combined with GABA.

Memory: ★★★★☆    Focus: ★★★★★    Mood: ★★★★★
Vitamin B5 (Pantothetic Acid)

Vitamin B5, also known as Pantothetic Acid (3-[(2,4-Dihydroxy-3,3-dimethylbutanoyl)amino]propanoic acid), is an organic essential nutrient within the B vitamin complex. Like all B vitamins, B5 converts sugars, starches, and fats into energy. This energy is then made available to brain cells in the form of glucose. Vitamin B5 also assists in the processing of choline as it metabolizes into acetylcholine. Acetylcholine is a neurotransmitter which is closely tied to memory function, neural signaling, and logical reasoning skills. B5 Pantothetic Acid is typically taken with Choline supplements like Alpha GPC or Citicoline for memory and learning benefits. It accentuates mental clarity and lifts brain fog. B5’s activation of acetylcholine also gives it strong neuro-protective qualities which add to brain plasticity.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★

Vitamin B6 (Pyrodoxine)

Vitamin B6 (Pyrodoxine) is an organic nutrient that the body uses to convert carbohydrates into energy, in the form of glucose. B6 also stimulates the production of several key neurotransmitters, by converting 5-HTP into serotonin and melatonin, and converting L-DOPA into epinephrine, norepinephrine, and dopamine. B6 regulates homocysteine levels for heart health, and combines with B12 and B9 to create red blood cells. Vitamin B6’s cognitive benefits include heightened motivation, mental clarity, concentration, and improved signaling between neurons. The neurotransmitters it creates can provide a substantial mood lift and natural energy. B6 has also been linked to GABA production, which means that significant stress reduction can be added to its benefits. Pyritinol is a nootropic agent that combines two Pyridoxine molecules together for stronger effects.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★
Vitamin B8 (Inositol)

Inositol is an isomer of glucose which is considered one of the B-complex vitamins. It is found in food sources like nuts, grains, beans, and some fruits. Inositol enhances the activity of choline, and improves overall neural communication. It also is responsible for transporting fats. Inositol’s nootropic benefits include enhanced mental focus, improved mood, faster speed of thoughts and better reasoning skills – known as “fluid intelligence.” Inositol is a viable therapy for fighting the symptoms of depression. It has anxiolytic qualities and can reduce the impact of anxiety, stress and panic attacks. Inositol has been effectively used to calm and focus the minds of ADHD patients, and has also been prescribed to treat more serious cognitive imbalances like Alzheimer’s disease, OCD or schizophrenia.

Vitamin B12 (Cobalamin)

Vitamin B12 (Cobalamin) is one of the 8 organic B vitamins. B12 plays a huge role in cellular metabolism, synthesizing fatty acids and creating glucose as an energy source for the body. B12 helps maintain the integrity of nerve cells. It produces DNA and RNA, and joins with vitamin B9 (folic acid) to create red blood cells. B12 also is involved in the production of S-adenosylmethionine (SAMe), which is essential for the breakdown of key neurotransmitters serotonin, melatonin, and dopamine. B12 is frequently taken to lift overall energy levels, reduce stress, and restore normal sleep cycles. B12 users experience improved memory and faster access to thoughts. The vitamin is also used as a neuroprotective life extension supplement to slow dementia and fight the onset of some cancers.
Nootropic Nutrients

Nootropic nutrients are any organic compounds which the human brain can utilize to enhance natural mental functions, protect against disease, repair damage, and stimulate heightened states of cognition. This category can include amino acids, sugars, and chemical elements. Nootropic nutrients can support the growth and repair of neural tissues. They also can stimulate the production of neurochemicals which in turn regulate various physical reactions. Nootropic nutrients can regulate metabolism and generate energy in the short term, as well as provide long term protection for various systems. Nootropic nutrients are commonly taken for organ support, immunity, to boost cellular health, and fight depression. They can create an environment of neuroplasticity for enduring mental health.

Agmatime Sulfate

Agmatime Sulfate is the decarboxylized derivative of L-Arginine, an essential amino acid. Agmatime Sulfate binds with NMDA Glutamate receptors, limiting the natural effects of Glutamate, which can tend to over-stimulate the brain. This action has a positive effect upon synaptogenesis, the ability of synapses to easily grow and transmit messages to neurons. Agmatime Sulfate is also an analgesic, stimulating the release of endorphins and some opioids. The user benefits of this supplement include calming mood effects, relief from anxiety symptoms, and pain relief. Agmatime Sulfate is also frequently taken to enhance athletic performance and lean muscle growth, which it accomplishes by improving the body’s insulin response.

Memory: 

Focus: 

Mood: 

NOOTRIMENT.COM
Carnosine

Carnosine ((2S)-2-[[3-Amino-1-oxopropyl]amino]-3-(3H-imidazol-4-yl)propanoic acid) is an organic building block of protein, produced in human brain and muscle tissue. Carnosine improves insulin response and lowers glucose levels in the body. It functions as an antioxidant and fights oxidative damage in cells. Carnosine is also anti-inflammatory. It is frequently taken as part of an anti-aging regimen, as it offers strong protection against age-related decay and disease. Carnosine opposes the actions of some proteins which cause serious degenerative diseases like dementia and Alzheimer’s disease. In healthy minds, it promotes better memory function overall. Carnosine has also received a lot of attention as a possible longevity/life extension supplement.

Memory: ★★★★★★ Focus: ★★★★★★ Mood: ★★★★★★

Iodine

Iodine is a trace element that must be utilized by humans in the synthesis of thyroid hormones. It is commonly found in soil and ocean water, as well as the human body. The thyroid gland uses iodine it captures from the blood as the building blocks of key hormones such as T3 and T4. These hormones play a role in the metabolism, sexual function, and growth of muscle and bone. They also aid the function of all glandular systems, like the pituitary and endocrine systems. Iodine’s benefits include better metabolism, improved immunity response, and more efficient use of nutrients from food. Iodine provides a natural energy boost, and can contribute to healthy growth of organs. Iodine is also frequently taken to aid in restoring regular sleep cycles. Low iodine levels are connected with low IQ scores and diminished brain function.

Memory: ★★★★★★ Focus: ★★★★★★ Mood: ★★★★★★
L-Glutamine

L-Glutamine (2-Amino-4-carbamoylbutanoic acid) is an abundant amino acid in the human body. Like all aminos, it is one of the building blocks of protein. L-Glutamine also provides fuel to cells in the form of nitrogen and carbon. It provides brain cells with a supply of Glutamic Acid. It also is an important element in the production of GABA and Glutamate. Both of these substances are responsible for regulating the excitatory nerve messages in the central nervous system. L-Glutamine’s benefits include improved reasoning abilities, enhanced creativity, and better verbal skills. It is a known stress and anxiety reliever. L-Glutamine’s stimulation of GABA can assist with better relaxation and a return to regular sleep cycles. L-Glutamine is also used to improve athletic performance, as the infusion of nitrogen it provides to cells enhances muscle growth.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★★

Lysine

Lysine is an essential amino acid that cannot be produced by the human body. In addition to contributing the digestion, Lysine works to limit low-density lipoproteins, also known as “bad cholesterol.” Lysine stimulates the production of carnitine, which lowers cholesterol by metabolizing fatty acids. Lysine has strong anti-viral effects, and blocks the action of arginine, a key instigator of HSV replication. Lysine is frequently taken to inhibit the growth of cold sores or herpes outbreaks. It is also known to improve athletic performance and endurance, while promoting weight loss. L-Lysine is a powerful immunity booster. As a nootropic, Lysine has anxiolytic effects, can improve memory, sharpen thoughts, and enhance reasoning functions.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★★
**Magnesium**

Magnesium is a natural chemical element found in the human body, as well as an alkaline metal found abundantly in the Earth’s biochemistry. Magnesium combines with hundreds of different enzymes to participate in key reactions throughout the body. These include nerve impulse control, muscle function, blood pressure, metabolism, and the synthesis of DNA, RNA, and ATP. It also up-regulates NMDA receptors. Magnesium’s cognitive benefits include enhanced memory, easier learning, and regulation of over-firing neurons. It is frequently taken for its calming mood effects, and is known to combat symptoms of anxiety. Magnesium is also excellent at reducing stress factors which contribute to insomnia, and for this reason is often recommended as a sleep aid.

| Memory: | ★★★★★ | Focus: | ★★★★★ | Mood: | ★★★★★★ |

**Omega 3**

Omega 3’s are polyunsaturated fatty acids commonly found in fish, nuts, and seeds. These acids, specifically named ALA (fish sources) and EPA/DHA (vegetarian sources), improve the health and function of cell membranes throughout the body. In the human brain, Omega 3 fatty acids contribute to excellent neural tissue health, and can significantly prevent the risk of age-related degenerative disorders such as dementia and Alzheimer’s disease. Omega 3 supplements reduce inflammation in the brain, and support overall improved cognitive function. They calm the hyperactive thoughts of ADHD and effectively combat depression symptoms. Throughout the body, Omega 3’s improve circulation and lower blood pressure, reduce the risk of ischemic stroke, and fight many cancers.

| Memory: | ★★★★★ | Focus: | ★★★★★ | Mood: | ★★★★★★ |
Krill Oil

Krill Oil is a type of Omega 3-rich oil derived from krill, a small, abundant crustacean found in every ocean on Earth. Krill Oil contains both EPA and DHA fatty acids, in a double chain phospholipid structure. The primary function of Omega 3 fatty acids in the body is to strengthen and repair cell membranes. In the brain, better cell integrity leads to healthy neural tissue and facilitates the normal growth of neurons and synapses. In this environment, thoughts flow more easily. Improved signaling leads to more mental alertness and control, which can be of great benefit to ADHD patients. Krill oil also lowers cholesterol and cuts inflammation. Within brain tissue, unchecked inflammation is the root cause of many degenerative diseases related to age.

Memory: ★★★★★ ★★★★★ ★★★★★

Fish Oil

Fish Oil is an essential fatty acid derived as a byproduct from various sea life. This oil is rich in the Omega 3 long-chain fatty acids EPA and DHA. Fish Oil works to maintain and repair the function of cell membranes. This aids in cellular metabolism, nutrition, waste removal, and all other functions which require material to move in and out of cells. Cell function is more efficient and supplies more energy to the vital functions of the body. Fish oil is also anti-inflammatory. In the brain, Fish Oil’s Omega 3s can reduce the inflammation that leads to many degenerative diseases, such as Alzheimer’s, Parkinson’s disease, and dementia. By improving cell membrane integrity in the brain, Fish Oil can reduce brain shrinkage and improve overall cognitive function.

Memory: ★★★★★ ★★★★★ ★★★★★

NOOTRIMENT.COM
Phosphatidylserine

Phosphatidylserine is a type of human fat described as a negatively charged aminophospholipid. Phosphatidylserine is a key part of all cell membranes. It can make these membranes more fluid and higher functioning, even repairing damage connected to aging. Phosphatidylserine stimulates the production of acetylcholine and Dopamine. These important neurotransmitters play a strong role in memory, learning, mood, and energy. Phosphatidylserine’s benefits include improved speed and accuracy of recall. It creates heightened states of concentration, and a sense of robust mental energy. Phosphatidylserine is frequently taken as a long term anti-aging supplement. It can prevent stroke, and repair damage sustained from years of drug and alcohol abuse.

Memory: ★★★★★★ Focus: ★★★★☆☆☆ Mood: ★★★★☆☆☆

SAMe

SAMe (S-Adenosyl Methionine) is an organic compound produced by the human body which is used in the methylation cycle. This pathway regulates many key bodily functions, including DNA production, immunity, mood, inflammation response, and energy generation. SAMe participates in methylation, stimulating gene transcription. It fires the production of Phosphatidylcholine in cell membranes, improving intercellular communication. It also facilitates the production and absorption of serotonin, dopamine, and melatonin. SAMe benefits include the treatment of depression and promoting positive mood. It can also reduce inflammation in the brain, leading to overall neural longevity and fluid intelligence.

Memory: ★★★★★☆ Focus: ★★★★☆☆☆ Mood: ★★★★☆☆☆
Sarcosine

Sarcosine, a metabolite of Glycine, is an organic amino acid which is produced by the human body. It is also found in turkey, legumes, and egg yolks. Sarcosine plays a role in metabolism. It can affect testosterone levels and activate NMDA receptors by increasing Glycine levels in the brain. Sarcosine stimulates the pituitary gland and aids in the release of several key brain hormones. It is commonly taken as a memory-enhancing supplement. It can improve the speed and accuracy of memory and recall, as a result of glycine binding to glutamate. Sarcosine has also been shown to stimulate luteinizing hormone, which can affect the growth of male and female secondary sexual characteristics, such as hair and musculature.

Memory: ★★★★★ ★★★★★ ★★★★★

Taurine

Taurine (2-aminoethanesulfonic acid) is an organic compound found in human bile. This sulfonic acid is a derivative of the amino acid cysteine. Taurine acts as an inhibitor and depressant in the central nervous system. It does this by binding with GABA receptors and performing similar anxiolytic roles that GABA does in the body, controlling the over-firing of nerves. Taurine lowers stress-induced cortisol levels. It also participates in Long Term Potentiation, the physical formation of long term memory via neural pathways. Taurine is frequently taken in conjunction with sports and heavy exercise. While it can bring a calm and focused state of mind, it also improves endurance. It also fights the symptoms of social anxiety. Long term use of Taurine can protect the body from cardiovascular disease and control diabetes.

Memory: ★★★★★ ★★★★★ ★★★★★
Phenylalanine

Phenylalanine is an essential amino acid found in many meats, dairy, and wheat. The compound helps to synthesize the neurotransmitters dopamine, norepinephrine, epinephrine, and melatonin. These chemicals are closely related to mental clarity, wake/sleep cycles, natural energy, stress management, and pleasure. Phenylalanine is also a core component of Tyrosine, an amino acid with strong anxiolytic effects. Phenylalanine supplements are used to fight depression and anxiety symptoms. They also can contribute to heightened concentration and mental focus. It has been successfully prescribed for patients with hyperactivity disorders such as ADHD, for whom it can have a dramatically calming effect. Phenylalanine is also an analgesic pain reliever.

Memory: ★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★
Nerve Growth Promoters & Brain Protectants

Nerve growth promoters are compounds that participate in the growth, repair, and maintenance of nerve cells, or neurons. This can include protein-based Nerve Growth Factor, or related supplements which specifically target nerve function. The category of brain protectants typically includes cerebral anti-oxidants. Many of the most severe degenerative cognitive disorders associated with aging arise from the decay of nerve cells. This is frequently a result of oxidation damage when these cells come into contact with free radicals over time. Most users take nerve growth promoters and brain protectants to increase cognitive energy and performance in the short term, while laying the foundation for healthy long term neural functions and improved brain plasticity.

Co-Enzyme Q10

Co-Enzyme Q10, commonly referred to as CoQ10, is a naturally occurring component of the electron transport chain. The body uses this substance as a vitamin for cellular respiration and the synthesis of ATP. CoQ10 is a very powerful anti-oxidant which detoxes cells and protects them from free radical damage. Free radicals are roving molecules in the body which have been damaged by oxygen exposure. When free radicals come into contact with healthy cells, they can cause decay which leads to serious disease, rapid aging symptoms, and cancers. Taking a regular CoQ10 supplement can improve overall energy and mental performance. It is an antidote to brain fog and creates a perception of fast, fluid intelligence. These qualities make it an essential component of neuro-protective anti-aging regimens.

Memory: ★★★★★☆ Focus: ★★★★★☆ Mood: ★★★★★☆
Idebenone

Idebenone is a synthetic form of CoQ10 made with a shorter chained quinone compound. Its chemical structure makes it more bioavailable than comparable amounts of CoQ10. It can also cross the blood-brain barrier which makes it superior to CoQ10 for nootropic purposes. Like CoQ10, Idebenone is a powerful anti-oxidant, which scavenges the body for free radicals. In this way, Idebenone protects the cells of the body from oxidative damage. Idebenone increases NGF (Nerve Growth Factor), a protein which directly assists the growth and repair of neurons and nerve cells in the brain. Idebenone also facilitates the absorption of choline in the brain. Its user benefits include stronger metabolism, easy access to memory, and heightened states of concentration. Over the long term, Idebenone supplementation can have significant neuroprotective qualities.

Memory: ★★★★★  Focus: ★★★★☆  Mood: ★★★★★

Natural Nootropics

Natural nootropics are organic supplements derived exclusively from plant and food sources, for the purpose of cognitive enhancement. Unlike synthetic drugs, these supplements have often been used in traditional herbal medicine stretching back hundreds or even thousands of years. Contemporary scientific analysis explores the ways in which these ancient remedies act upon natural brain chemistry to produce their effects. By stimulating, imitating, or inhibiting natural neurochemicals, these alkaloid and compounds are able to accentuate normal function, slow down stress responses, and protect against decay. The benefits of natural nootropics typically come with few side effects, with proven tracks records from countless generations of safe usage.
Artichoke Extract

Artichoke Extract is derived from the leaves of the common vegetable, and is a source of vitamins A, B, and C, as well as minerals chromium, magnesium, and potassium. Artichoke Extract is typically taken in conjunction with the natural supplement Forskolin. Together the pair boosts levels of cAMP (cyclic adenosine monophosphate). cAMP plays a key role in memory formation, and assists in the physical processes required for long term memory storage. Artichoke Extract facilitates this process by inhibiting PDE-4 (Phosphodiesterase-4) a substance which limits cAMP. Artichoke Extract and Forskolin stacks (sold under the name CILTEP) are typically taken to improve cognitive functions like logical reasoning, and short and long term memory.

Memory: ★★★★★ ★★★★★ ★★★★★
Focus: ★★★★★ ★★★★★ ★★★★★
Mood: ★★★★★ ★★★★★ ★★★★★

Ashwagandha

Ashwagandha, also known as the “Indian Ginseng,” is a supplement derived from the root of the Withania somnifera plant native to India, North Africa, and the Middle East. The plant has natural anti-microbial and anti-oxidant properties. It scavenges the body for harmful bacteria and destroys it. For this reason, it has been used as a cure-all medication in Indian medicine for thousands of years. Ashwagandha also creates similar effects to natural GABA, a neurotransmitter which restricts over-excitement of nerve cells. Ashwagandha’s primary nootropic benefits include cessation of anxiety symptoms and restlessness. It is often taken as an antidote to drug withdrawal. Ashwagandha also boosts memory, promotes good sleep, and can make learning easier.

Memory: ★★★★☆ ★★★★☆ ★★★★☆
Focus: ★★★★☆ ★★★★☆ ★★★★☆
Mood: ★★★★★ ★★★★★ ★★★★★
Bacopa Monnieri

Bacopa Monnieri is a North Indian herb that is widely used in Ayurvedic medicine. The high Hersaponins content of Bacopa Monnieri extracts create powerful anxiolytic and relaxing effects. It is useful in maintaining the speed of nerve transmissions in the hippocampus. As we age, the strength of these transmissions grows weaker, causing memory loss and other cognitive dysfunction. Bacopa Monnieri with Bacosides is widely taken for its calming, tranquilizing mood effects. It is also an excellent natural sleep aid. The supplement is known to reduce all forms of anxiety, especially social anxiety, making it a popular tool for overcoming shyness. Over time, Bacopa Monnieri can improve memory, and prevent the cognitive decay that comes with aging.

Memory: ★★★★★★ Focus: ★★★★★★ Mood: ★★★★★★

Forskolin

Forskolin is an extract of the Indian Coleus plant (Coleus Forskohlii), similar to the Vitamin A derivative retinol. Categorized as a labdane diterpene supplement, Forskolin is antibacterial, anti-fungal, anti-microbial, and anti-inflammatory substance. Forskolin activates the enzyme adenylate cyclase to produce cAMP (Cyclic adenosine monophosphate) a cellular messenger which initiates the physical transformations required in the brain to create long term memory (Long Term Potentiation). Forskolin benefits include greatly enhanced memory ability, both short and long term. It boosts reasoning, the ability to learn, and helps to prevent mental strain when studying for long periods of time. When Forskolin is paired with Artichoke Extract as in the CILTEP stack, these qualities are even more pronounced.

Memory: ★★★★★★ Focus: ★★★★★★ Mood: ★★★★★★

Nootriment.com
Grape Seed Extract

Grape Seed Extract is the flavonoid and Vitamin E-rich derivative of the common fruit. Grape Seed Extract is loaded with polyphenols, and with the phytoalexins Pterostilbene and Resveratrol, natural plant-based infection fighters. Phenolic OPCs in this natural extract give it very strong anti-oxidant properties. The Resveratrol content improves circulation, can destroy cancer cells, and has even been linked to lifespan increases in lab experiments. Grape Seed Extract fights infections of all kinds, and is frequently taken as a natural alternative to antibiotics. By eradicating bacterial pathogens in the brain, Grape Seed Extract contributes to overall neural health and longevity.

Memory: ★★★★★ Focus: ★★★★☆ Mood: ★★★★★

Ginseng

One of the most popular and widely used herbal supplements in the world, Ginseng is derived from the roots of the Panax Araliaceae plant native to Eastern Asia. Ancient Chinese folk medicine employed Ginseng as a stimulant, sexual performance enhancer, and memory booster. Today, Ginseng is considered an adaptogen compound, which means it naturally balances emotions and reduces stress in users. It also contains steroids, called Ginenosides, which provide stimulating energy enhancement. Ginseng is a powerful anti-oxidant which helps protect cells against oxidative damage. Ginseng’s mental benefits include calming mood, the reduction of anxiety symptoms, boosting natural energy, and heightened concentration. Its most famous effect is memory enhancement. Ginseng improves spatial and working memory, and can prevent the loss of memory skills due to age-related cognitive degeneration.

Memory: ★★★★★ Focus: ★★★★☆ Mood: ★★★★★
Hordenine

Hordenine (N,N-dimethyltyramine) is a natural derivative of barley grass. It is chemically similar to phenylethylamine, which is also known as the “Love Drug” among neurotransmitters. Hordenine is a natural MAO-B inhibitor. MAOs are known for breaking down neurotransmitters which relate to energy, emotional balance, and stress management. By restricting the action of MAO-B, Hordenine specifically protects levels of dopamine in the brain. It stimulates the adrenergic system, increasing the release of norepinephrine. User benefits include strong natural energy, higher motivation, and enhanced libido. Hordenine also increases attention span and heightens mental focus. It also curbs appetite, making the supplement useful for weight loss.

Memory: ★★★★★★★ Focus: ★★★★★★★ Mood: ★★★★★★★

Kava Kava

Kava Kava is a traditional herbal remedy derived from the leaves of the Piper Methysticum native to the Western Pacific. The active ingredient of the plant, known as kavalactones, potentiate the effects of the inhibitory neurotransmitter GABA. GABA soothes chemical stress reactions in the brain by preventing over-firing of nerves. Kava Kava acts in a similar fashion by binding to GABA receptors. It is most frequently taken to relieve stress and anxiety. Its calming effects can make chaotic, over-excited thoughts easier to manage. Kava Kava also has physical analgesic effects, and creates a state of full-body relaxation. The release of stressful thoughts can improve mental focus and generate feelings of peaceful confidence.

Memory: ★★★★★★★ Focus: ★★★★★★★ Mood: ★★★★★★★
**Kratom**

Kratom is the name for the alkaloid-rich dried leaf of the Mitragyna speciosa tree, native to Southeast Asia. Either ground into a powder or extracted into other forms, Kratom has been used a medicinal remedy for thousands of years. Kratom’s alkaloids mitragynine, speciogynine, and paynantheine act as opioid receptor agonists, binding to receptor sites to generate both stimulant and depressant effects. Kratom increases blood flow to the brain, lowers overall blood pressure, relaxes muscles, and creates positive mood effects like euphoria. Larger doses tend to produce more sedative effects, while smaller doses are more stimulating. Kratom’s many benefits include all-day energy, mental focus, greater productivity, higher libido, and easier management of stress. It has been used to ease the symptoms of opiate withdrawal. Kratom is also a strong analgesic and is useful in pain management.

Memory: 💫💫💫💫💫 Focus: 💫💫💫💫💫 Mood: 💫💫💫💫💫

**Lion’s Mane**

Lion’s Mane refers to the mushroom species Hericium Erinaceus. A staple of Chinese medicine, Lion’s Mane contains a wealth of vitamins, minerals, polypeptides, and polysaccharides. Lion’s Mane increases the brain’s supply of Nerve Growth Factor (NGF). This essential substance increases neurogenesis and synaptogenesis, and improves overall neuroplasticity. This mushroom produces calming, focusing mental effects, which can make it a viable ADHD therapy. It can also improve symptoms of many serious nerve disorders, such as multiple sclerosis and muscular dystrophy. Lion’s Mane may also be able to treat obsessive compulsive personality disorder (OCD) and age-related degenerative diseases like Alzheimer’s and dementia.

Other Names: Hericium Erinaceus, Yamabushitake

Memory: 💫💫💫💫💫 Focus: 💫💫💫💫💫 Mood: 💫💫💫💫💫

**Nootriment.com**
Lemon Balm

Lemon Balm is an herbal remedy derived from the minty leaves of the Melissa officinalis plant. Lemon Balm is considered an adaptogen, which means it helps the mind manage stress and achieve physical and emotional homeostasis. This natural nootropic contains the compound Eugenol, which is known to relax muscles. The supplement also has an inhibitory effect upon GABA transaminase, a compound which prevents the soothing effects of natural GABA. Lemon Balm binds with nicotinic and muscarinic receptors in order to potentiate the effects of acetylcholine, a neurotransmitter involved in memory and learning. Lemon Balm works as an anti-anxiety aid, providing states of calm and relaxation for the user. It also boosts cognitive performance through increases to memory and sensory perception. Many people take this herb as an effective sleep aid.

Memory: ★★★★★ Focus: ★★★★☆ Mood: ★★★★★

Marijuana

Marijuana is a cannabinoid-rich plant which has been smoked and consumed for medicinal purposes for thousands of years or more. Its most active component, THC, interacts with the brain’s cannabinoid receptors, replacing a natural neurotransmitter known as Anandamide. This interaction stimulates the basal ganglia and the cerebral cortex, impacting various cognitive processes and emotional states. THC has also been linked to improved neurogenesis – the healthy growth of new neurons. Marijuana’s benefits include calming of mood, physical relaxation, and analgesic effects. Many people use marijuana for its psychedelic sensory effects, as a boost to creativity or appreciation of nature. THC may improve logical reasoning ability and neural communication. There are, however, side effects as well as concerns regarding long-term safety for the brain.

Memory: ★★★★★ Focus: ★★★★☆ Mood: ★★★★★☆
Oat Straw

Oat Straw supplements are made from the immature buds of the avena sativa plant, more commonly known as green oat grass. Oat Straw promotes the release of luteinizing hormones in the body. These pituitary gland hormones stimulate cell growth, and also boost the growth of male and female secondary sexual characteristics. It also acts as a diuretic. Oat Straw’s benefits include overall cognitive improvements, such as heightened concentration, longer attention span, and strong anti-anxiety qualities. Oat Straw can also boost male libido. It is a strong analgesic which can reduce leg and joint pain. Oat Straw can also lower blood pressure and fight some cancers.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★

Piperine

Piperine is an alkaloid of the Piper nigrum plant, commonly known as a pepper vine. It is a component of the widely-used spice pepper. In supplement form, this alkaloid is combined with the geometric isomer chavicine. Piperine increases metabolism and facilitates the transport of key nutrients throughout the body. Piperine functions as a natural Monoamine oxidase inhibitor (MAOi), preserving levels of dopamine and serotonin. Its benefits include excellent anti-depressive qualities. Higher levels of dopamine and serotonin can dramatically enhance mood and provide strong natural energy. Concentration and attention span are heightened, and motivation to complete tasks is improved. Overall, Piperine increase the bioavailability of other natural nutrients. It also acts as an immunomodulator, providing backup for the body’s overall immune response.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★
Pterostilbene

Pterostilbene (4-[(E)-2-(3,5-Dimethoxyphenyl)ethenyl]phenol) is a plant-based phytoxin which can be found in berries and grapes. Similar to resveratrol, Pterostilbene is a natural infection-fighter. It limits the effectiveness of inflammatory mediators, reducing inflammation in the body and helping prevent many inflammation-related disorders. This herbal compound plays a role in cell health by regulating genes which cause programmed cell death (apoptosis) and cancer cell proliferation. Pterostilbene up-regulates brain proteins relating to memory function. It is a neuroprotective extract which can prevent the onset of many age-related degenerative diseases by fighting inflammation. Inflammation is a contributing cause of many of these conditions, such as Alzheimer’s disease. Pterostilbene promotes healthy circulation, lowers cholesterol, and protects against oxidative stress.

Memory: ★★★★★ ★★★ ★★★★☆ Focus: ★★★★★ ★★★ ★★★★☆ Mood: ★★★★★ ★★★ ★★★★☆

Resveratrol

Resveratrol is a natural phenol stilbenoid found in grapes and some other fruits. Resveratrol is a strong anti-oxidant which provides excellent protection against oxidative damage throughout the body. It also increases circulation via vasodilation, and lowers LDL cholesterol. Resveratrol promotes the release of the adrenal hormone norepinephrine. This leads to the main cognitive benefits of increased mental focus, a greater sense of alertness, and increased attention span. The compound has also been linked to longevity, activating genes which could dramatically prolong lifespan. Resveratrol is difficult to supplement with because it is not very bioavailable and much of it is lost during the digestion process. For this reason, Pterostilbene may be more effective in a nootropic stack.

Memory: ★★★★★ ★★★ ★★★★☆ Focus: ★★★★★ ★★★ ★★★★☆ Mood: ★★★★★ ★★★ ★★★★☆
Rhodiola Rosea

Rhodiola Rosea is the root of a high altitude plant known as Golden Root, Rose Root, or King’s Crown. When extracted for consumption, the root works as an adaptogen, bringing physical stress reactions and emotional states into balance. Rhodiola Rosea stimulates AMPK enzymes, which boost cellular mitochondria and in turn create greater energy. The root also is an MAO inhibitor, helping to maintain levels of serotonin and dopamine. Rhodiola Rosea interacts with the opioid peptide beta-endorphin to positively impact mood. Its natural benefits include stress relief, management of depression symptoms, and strong anti-fatigue effects. Rhodiola Rosea induces heightened concentration and mental focus. It can increase motivation, while delivering the energy necessary to follow through.

Memory: ★★★★★☆ Focus: ★★★★★☆ Mood: ★★★★☆☆

St John’s Wort

St John’s Wort is an herbal remedy derived from the Hypericum perforatum plant, also known as goatweed, Klamath, or Rosin Rose. The supplement has a centuries-old history of folk use for a broad range of physical injuries and emotional disorders. Its main effect is the prevention of serotonin re-uptake. Serotonin is a key neurotransmitter related to calm mood, peaceful feelings, and optimism. By maintaining levels of serotonin, St John’s Wort can be a powerful weapon against depression. It also has a calming effect on over-firing neurons, leading to even more relaxing effects. St John’s Wort is widely used as a natural alternative to anti-depressants. It can bring peaceful, tranquil feelings to sufferers of OCD and ADHD, and has powerful anti-anxiety qualities.

Memory: ★★★★★☆ Focus: ★★★★★☆ Mood: ★★★★☆☆
Yerba Mate

Yerba Mate is a natural remedy derived from the Ilex paraguariensis Holly plant, native to South America. Its leaves, rich in vitamins and minerals like Vitamin A, B, C, E, magnesium, selenium, and inositol, are widely consumed in the form of tea. Yerba Mate is a central nervous system stimulant which contains caffeine. However, many users say that it does not cause the typical side effect associated with excessive caffeination. It increases metabolism, and helps to produce ATP, ADP, and AMP, noted sources of cellular energy. It is also a vasodilator, which improves circulation throughout the body, including the brain. Yerba Mate is taken to increase mental focus and stimulate a feeling of alert energy. Its effects are similar to those of coffee, but Mate is considered more gentle, with less side effects. Yerba Mate is an excellent anti-oxidant which can detox cells, boost immunity, and guard against some cancers.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★★

AC-11

AC-11 is an organic medicinal substance derived from Cat’s Claw plants, also known as Uncaria tomentosa and Uncaria guianensis. AC-11 is a source of CAE (Carboxyl Alkyl Esters), organic acids which protect and repair DNA strands that have been damaged by stress. AC-11 stimulates enzymes which help to generate these repairs. Its benefits include improved collagen production, which results in healthy skin and can reverse visible signs of aging. AC-11 also interacts with the protein complex NF-KB, regulating several effects connected to DNA, such as cell growth and programmed cell death (apoptosis). Finally, this natural compound inhibits inflammatory responses throughout the body. Left unchecked, inflammation can become the root cause of serious cognitive disorders such as Alzheimer’s disease.

Memory: ★★★★☆ Focus: ★★★★☆ Mood: ★★★★☆
2C-D

2C-D (2, 5-dimethoxy-4-methylphenethylamine) is an entheogen compound with psychedelic properties. Entheogens are ceremonial psychedelic drugs which are derived from natural sources like plants or their seeds. 2C-D is derived from Phenylethylamine, and as such can interact with a variety of neurotransmitters. Low doses of 2C-D can be used as a smart drugs. In smaller amounts, the compound can improve memory, heighten concentration, boost sensory sensitivity, and create feelings of mild euphoria. 2C-D can also improve empathy response, countering social anxiety symptoms. It is considered a milder form of the psychedelic empathy drug MDMA, and is thought to take on the characteristics of other drugs and supplements it is stacked with.

Memory: ★★★★☆ Focus: ★★★★☆ Mood: ★★★★☆

Neurohormones

Neurohormones are a class of hormones which are manufactured by neuroendocrine cells. These hormones are released into the bloodstream, and also can perform as neurotransmitters in the brain. In this case, hypophysiotropic or hypothalamic hormones are processed in the hypothalamus and transported to axon terminals for release through the pituitary gland. Dopamine, Epinephrine, Norepinephrine, and Oxytocin are some of the most well-known examples. These hormones have various specialized effects, including the stimulation of cellular growth, stress responses, fight or flight responses, emotional balancing, energy, and a host of cognitive effects. Benefits include stabilizing mood, the perception of alert energy, restoring sleep/wake cycles, and heightened concentration.
DHEA

DHEA (Dehydroepiandrosterone) is a common neurohormone produced in human adrenal glands. DHEA has a steroid-like function. Once synthesized, it is converted into male and female sex hormones. DHEA becomes a building block for testosterone and estrogen. This promotes the growth and health of secondary sexual characteristics. It supports the health of the adrenal gland and builds overall immunity. Other benefits include enhanced energy, mood boosting, and better memory function. It is commonly used by athletes as a performance enhancer. There is a lot of interest in the use of DHEA for anti-aging purposes. It can help reduce the visible signs of aging, and can also slow the dysfunction associated with aging. This is especially true in the case of adrenal insufficiency, a lack of cortisol and other hormones which can cause kidney problems, weight loss, fatigue, and depression.

Memory: ★★★★★ ★★★★★ ★★★★★
Focus: ★★★★★
Mood: ★★★★★

Vasopressin

Vasopressin (Diapid) is an amino acid peptide and antidiuretic neurohypophysial hormone that is naturally produced in the pituitary glands of all mammals. Vasopressin helps the cells and tissues of the body to stay hydrated. It also regulates the movement of glucose in the blood, working to promote a state of homeostasis in the body as a whole. Vasopressin can restore low blood pressure levels to normal, and is most often prescribed for this purpose. It also exerts several nootropic benefits such as better short term memory, heightened metal acuity, and deeper memory imprinting. For this reason, commercial forms of the compound are very popular with students. It is also used as a treatment for memory issues relating to age, such as dementia or Alzheimer’s disease.

Memory: ★★★★★ ★★★★★ ★★★★★
Focus: ★★★★★
Mood: ★★★★★
Desmopressin

Desmopressin is a synthetic replacement for the natural neurohormone Vasopressin. It is also sold under the brand names DDAVP, DesmoMelt, Stimate, and Minrin. Like Vasopressin, Desmopressin is an antidiuretic hormone, which helps the body preserve optimum states of hydration. Desmopressin can regulate blood pressure, blood sugar, and circulation. These are the prescribed uses for the drug. The compound does also have some notable off-label nootropic benefits, such as improved short-term memory, faster reaction times, and more accurate imprinting of information. These uses for the drug have not been extensively tested and are not recommended for the public at this time.

Melatonin

Melatonin is an organic neurohormone created by the mammalian pineal gland. It is released in response to exposure to light. More of the compound is produced in darkness, while none is produced in the presence of strong light. This timing has evolved to correspond with human circadian sleep cycles. When the compound binds with Melatonin receptors, it can induce drowsiness and lower body temperature, setting conditions for natural sleep. Melatonin, able to cross the blood-brain barrier, also acts as a powerful antioxidant in neural tissues. It has a particularly protective quality in conjunction with stroke, and can prevent symptoms such as brain cell and neuron death. Most people take Melatonin supplements to fight insomnia and restore healthy sleep patterns. The supplement supports deeper REM sleep and lucid dreaming. It does not cause any hangover-type effects upon waking.
**Pregnenolone**

Pregnenolone is a natural neurosteroid which is derived from cholesterol in the adrenal glands, liver, brain, skin, and sex organs. It is also an important precursor to various other neurohormones, such as progestogens, mineralocorticoids, glucocorticoids, androgens, estrogens, and DHEA. Pregnenolone is active at NMDA receptor sites, where it regulates communication between neurons and assists in the formation of new synapses. Through this action, it is able to enhance Long Term Potentiation, the formation of long term memories. Pregnenolone can reduce imbalanced levels of the stress chemical cortisol, lifting mood and making stress triggers more manageable. It is a powerful anxiolytic and can reduce the impact of panic attacks. Pregnenolone aids the repair and maintenance of neural structures which have been damanged by injury or aging.

**Memory:** ★★★★★  
**Focus:** ★★★★★  
**Mood:** ★★★★★

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**Nootropic Drugs**

Nootropic drugs are any pharmacological compounds which can improve cognitive functions by interacting with natural brain chemistry. They can be derived from natural sources, or be comprised of synthetic variations of those sources created in a lab. Nootropic drugs primarily work by manufacturing, potentiating, or restricting the amounts of natural neurotransmitters, enzymes, and hormones. They can have either stimulating or depressive effects, raising or lowering blood pressure as needed. Nootropic drugs often interact with the growth, health, repair, and communication of neurons and synapses. Through this action, they are able to enhance memory, lift mood, and heighten learning abilities. These drugs can also restore imbalance and fight symptoms of many cognitive disorders, such as ADHD or even Alzheimer’s disease. Nootropic agents offer a broad range of user benefits, promoting fluid intelligence and social confidence with applications for school, business, and home.
Cerebrolysin

Cerebrolysin is a neuropeptide solution which is administered via injection. Cerebrolysin works in the same way that endogenous (natural and internally generated) neurotrophic factors do in the body. Peptides aid neuron communication, and prompt neurogenesis in the hippocampus. This area of the brain is key to the formation of memory. Cerebrolysin’s nootropic benefits include better memory imprinting and recall. For this reason, the drug is frequently prescribed for Alzheimer’s patients, or other sufferers of serious degenerative memory disorders. Cerebrolysin also has a role in the longevity of cells, and can slow the rate of apoptosis (programmed cell death). It can also be used to treat dementia, stroke symptoms, or severe brain injuries.

Memory: ★★★★★ ★★★☆☆ ★★★☆★

Hydergine

Hydergine (Ergoloid Mesylates or dihydroergotoxine mesylate) is an ergot alkaloid drug which is derived from rye. Originally developed by famed chemist Albert Hoffman at the Sandoz lab, Hydergine works by modulating synaptic communication. It does this by stimulating dopaminergic and serotonergic receptors, and blocking some adrenoreceptors. Through this action, Hydergine increases levels of neurotransmitters dopamine, serotonin, and acetylcholine in the brain. Hydergine also improves blood and oxygen flow to the brain via ganglion cell metabolism and it is a powerful anti-oxidant for brain tissue. Hydergine physical benefits include regulation of blood pressure. It delivers cognitive benefits of improved mental clarity, better attention span, and alleviation of some depression symptoms.

Memory: ★★★★★ ★★★☆☆ ★★★☆★
Nicergoline

Nicergoline (C24-H26-Br-N3-O3) is an ergot alkaloid drug designed to treat vascular brain issues and their related effects. It functions as an adrenoceptor antagonist, raising blood flow to the brain and helping transport neurohormones. Nicergoline boosts cellular metabolism and regulates blood glucose levels, especially in the brain. It also potentiates the function of cholinergic and catecholaminergic neurotransmitters. Nicergoline benefits include heightened concentration, better sensory perception, and increased attention span. It can stimulate nerve growth in older brains, making it an excellent treatment for senility. Overall, it provides the brain with ample fuel in the form of blood and glucose, to help it work at optimum energetic capacity.

Memory: ★★★★★  Focus: ★★★★★  Mood: ★★★★★

Propanolol

Propanolol is a prescription beta blocker. The drug inhibits various effects of the sympathetic nervous system, specifically the action of the neurotransmitter norepinephrine. Responsible for several “fight or flight” stress reactions, an over-abundance of norepinephrine can cause serious cardio problems and emotional imbalance. While primarily prescribed to treat high blood pressure (hypertension) and prevent frequent heart attacks, Propanolol is also a powerful anti-anxiety and anti-stress medication. It can reduce stress reactions like rapid heart beat, panic attacks, and tremors. Tension headaches or migraines which stem from stress factors can be eliminated with the drug. Propanolol also effectively treats the symptoms of PTSD and performance anxiety due to public speaking.

Memory: ★★★★☆  Focus: ★★★★★  Mood: ★★★★★
Selank

Selank is a synthetic variation of the human tetrapeptide tuftsin. Tuftsin plays a significant role in immune response. Selank works to regulate the action of monoamine neurotransmitters, resulting in boosted levels of neurohormones like serotonin and dopamine. For this reason, Selank can produce strong anxiolytic effects. Selank has lower toxicity and addiction risks than traditional anti-anxiety medications like benzodiazepines. It also modulates brain-derived neurotropic factor (BDNF), a protein which impacts long term memory. Selank has a calming, tranquilizing effect, helping combat social anxiety and panic attacks. As a nootropic, it also makes focusing and concentration easier, especially in the presence of anxiety triggers.

Memory: ★★★★★☆ Focus: ★★★★★☆ Mood: ★★★★★☆

Semax

Semax (Pro8-Gly9-Pro10 ACTH(4-10)) is a neuroactive peptide derived from corticotropin which is very similar to Noopept powder. Semax has a broad range of neurotransmitter interactions, stimulating receptors for dopamine, serotonin, acetylcholine, and NMDA glutamate. Semax also has strong neuroprotective qualities, supporting and repairing neural structures and helping synthesize Nerve Growth Factor. Benefits include the boosting of memory and learning capacity through heightened Glutamatergic and cholinergic activity, promoting a perception of fluid intelligence. It can lift mood while making concentrating on challenging mental tasks easy and enjoyable. Semax also has psychostimulant effects which can generate feelings of strong natural energy.

Memory: ★★★★★☆ Focus: ★★★★★☆ Mood: ★★★★★☆
Nootropic Supplement Stacks

Nootropic supplement stacks are combinations of different cognitive enhancement compounds which have a synergistic effect when taken together. Nootropics work by interacting with natural brain chemistry to maintain, amplify, or inhibit normal cognitive processes. This is primarily achieved through interaction with neurotransmitters and their unique receptors. Nootropic supplement stacks are composed of elements which amplify these effects in a targeted fashion, improving speed, intensity, and breadth of results. Unique nootropic stacks can be created by individual users, based upon personal needs and goals. Many established pairings of compounds which are known to harmonize well are also offered as commercial “combo” products, which fuse several complementary nootropics into a single pill.

Alpha Brain

Alpha Brain is a popular nootropic stack product designed by Onnit Labs. Its ingredients include Alpha GPC, Huperzine A, Vinpocetine, AC-11, Bacopa Monnieri, Pterostilbene, L-Tyrosine, L-Theanine Oat Straw and Vitamin B6. The effects of this stack begin by employing Alpha GPC to boost choline, which is then converted into acetylcholine. This key neurotransmitter increases memory and learning capacity while laying a foundation for thriving neural growth. Tissues are nourished with blood and oxygen by Vinpocetine’s circulatory effects, while Huperzine A amplifies the effectiveness of acetylcholine. Other ingredients like L-Theanine add potent stress relief. Alpha Brain is said to improve focus, lengthen attention span, make learning easier, erase social anxiety, and lift mood.

Memory: ★★★★★ Focus: ★★★★★★ Mood: ★★★★★☆
CILTEP Stack

CILTEP stands for “Chemically Induced Long Term Potentiation.” This powerful memory-boosting supplement stack is comprised of Forskolin, Artichoke Extract, L-Phenylalanine, Acetyl L-Carnitine, and Vitamin B-6. Forskolin boosts cyclic adenosine monophosphate (cAMP), the key to intercellular communication and the biological changes required for long term memory formation. This process is protected by Artichoke Extract, which inhibits PDE-4, the chemical which naturally breaks down cAMP. Acetyl L-Carnitine (ALCAR) boosts acetylcholine production, while L-Phenylalanine provides energy for all of these processes. CILTEP can produce gains in both short and long term memory, aiding in successful studying. CILTEP also lifts mood, while providing strong mental focus and motivation.

Memory: ★★★★★ Focus: ★★★★★ Mood: ★★★★☆☆☆

New Mood

New Mood is a nootropic stack designed by Onnit Labs for the purpose of mood enhancement. New Mood contains L-Tryptophan, 5-HTP, Vitamin B6, Vitamin B3 (Niacin), Vitamin D3 and Magnesium. The stack also contains a proprietary blend of herbs like Valerian Root, Chamomile, Lemon Balm, and Jujube Seed Extract. Tryptophan and 5-HTP are important pre-cursors to the mood balancing neurotransmitter serotonin. All of New Mood’s other ingredients have been linked to calming, stress-reducing properties in the brain. This mood boosting stack can be taken daily as a general anxiolytic, or to quell acute panic attacks. It is also used as a sleep aid, and can restore imbalanced sleep cycles to normal. New Mood lives up to its name by delivering contented, peaceful emotional states, and the ability to effectively handle stress as it arises.

Memory: ★★★★☆☆☆ Focus: ★★★★★ Mood: ★★★★☆☆☆
Epiphany D1

Epiphany D1 is a memory pill and mental focus nootropic stack supplement. Its ingredients include Aniracetam, Oxiracetam, Sulbutiamine, Bacopa Monnieri, Vinpocetine, Mucuna Pruriens, and Alpha GPC Choline. Aniracetam and Oxiracetam interact with acetylcholine receptors and AMPA glutamate receptors to increase short and long term memory, improve information processing, and facilitate logical reasoning. Alpha GPC boosts choline, which converts into acetylcholine, the key neurotransmitter relating to memory and fluid intelligence. Sulbutiamine acts as an energy enhancing mood lifter. Vinpocetine and Mucuna Pruriens produce energy and balance Dopamine levels. Epiphany D1’s benefits include enhanced memory, heightened concentration, better blood flow to the brain, and anti-aging effects.

Stimulants

Stimulants are pharmacological compounds which induce temporary changes to mental and physical conditions, usually relating to energy levels. Stimulants produce these effects by chemically boosting or inhibiting various activities of the central and peripheral nervous systems. These effects can be achieved via the production of neurohormones like norepinephrine and dopamine, as well as interaction/agonism/antagonism of specific receptor cells. Stimulant benefits can include mental focus and alertness, greater motivation, sexual arousal, higher athletic endurance, and reduced appetite. Stimulants can also be powerful mood lifters. They can be used to treat a variety of cognitive disorders, such as OCD, ADHD, and depression. Under the technical definition for nootropics, stimulants are specifically precluded due to the prevalence of associated side effects. However, many users will stack stimulants with nootropics for improved benefits.
Geranamine

Geranamine, also known as Methylhexanamine or DMAA, is a stimulant which is similar to compounds derived from Geranium plants. Geranamine acts upon excitatory receptors in much the same way that pseudoephedrine and ephedrine work. Geranamine causes the release of norepinephrine and possibly also dopamine. Geranamine was originally intended as a nasal decongestant. Used as a nootropic stimulant, it can improve mental focus and attention span. It may also improve athletic performance. This is a synthetic product that is not identical to natural Geranium Oil. Its safety as a dietary supplement has been challenged by various sport and U.S. government health agencies, which have banned its use outright.

Other Names: 1-3-Dimethylamylamine

Ephedrine

Ephedrine is an organic stimulant which is derived from the alkaloids of the Ephedra Sinica or Ma Huang plant. Ephedrine stimulates the adrenergic system by boosting noradrenaline and imitating adrenaline. It also raises metabolism through thermogenesis, the conversion of calories into heat energy. Ephedrine does not target individual cognitive processes, but instead stimulates autonomic activity of the central nervous system, the unconscious network which controls visceral action. Benefits include intense energy, and the ability to concentrate upon tasks for a long period of time. Use of Ephedrine is banned by the FDA for any reason other than asthma, cold, or respiratory illness.
Nicotine

Nicotine is a plant-based parasympathomimetic alkaloid. When consumed or smoked, the compound acts as a nicotinic acetylcholine receptor agonist. This means it increases the volume of nicotinic receptors in the brain. This action causes the release of more acetylcholine, a powerful neurotransmitter related to memory, learning, and sensory sensitivity. Nicotine’s benefits include mental alertness, calm and focused thoughts, and the ability to concentrate. It can be a powerful mood lifter. Nicotine is fast acting and considered highly addictive, with severe withdrawals and high potential for abuse. It does have some positive long term effects, such as some protection from Alzheimer’s disease.

Memory: ★★★★★★ Focus: ★★★★☆☆☆☆ Mood: ★★★★★★

Octopamine

Octopamine is an endogenous biogenic amine derived from the amino acid Tyramine. It is very similar to the neurohormone norepinephrine. Octopamine activates metabolism of fat cells by stimulating beta3 adrenergic receptors. Octopamine also interacts with norepinephrine and dopamine receptor cells, and may act in much the same way as those neurochemicals. Octopamine can cause spiked increases to physical and mental energy. It creates a perception of mental alertness and heightened awareness to sensory information of all kinds. Octopamine’s metabolism effects can lead to desirable weight loss and increased efficacy of body building regimens. Higher metabolism in the brain can create a sense of fluid intelligence, with easy access to memories and fast-moving thoughts.

Memory: ★★★★★★ Focus: ★★★★☆☆☆☆ Mood: ★★★★★★
**Yohimbine HCL**

Yohimbine HCL is an MAO inhibitor derived from the West African Yohimbe tree. Yohimbine HCL is considered a stimulant because it increases the activity of the sympathetic nervous system, regulator of the body’s fight or flight reactions. It does this by raising levels of epinephrine and norepinephrine. This effect also increases the body’s rate of metabolism through thermogenesis, leading to more fat burning. Yohimbine HCL is primarily used to boost energy levels. It makes the mental focus and concentration required for activities like studying easier and more productive. Its MAOi properties can help regulate mood and create a sense of optimism and motivation. It clears brain fog, and enhances memory, reaction time, and libido. Yohimbe balances the side effects of SSRI medication, and promotes weight loss when combined with exercise.

| Memory: | ★★★★★ | Focus: | ★★★★★ | Mood: | ★★★★★ |

**Xanthines**

Xanthines are a class of stimulants derived from xanthine, a purine base found in the tissues of almost all organic life. These alkaloids exhibit excitatory or stimulant effects in the central and sympathetic nervous systems. They can also act as bronchodilators, opening bronchial passages. Xanthines restrict the effects of adenosine, a natural chemical which causes sensations of sleepiness. Xanthines can raise heart rate and boost circulation. They also can increase the activity of the respiratory system. Xanthines are typically taken for mild, short-term energy boosts. They can lift mood, provide mental focus, and create a sense of alertness. Some of these compounds, such as Caffeine, are considered highly addictive and can produce strong withdrawal effects when usage is ceased.
Caffeine

Caffeine, a xanthine alkaloid compound, is the most commonly used psychostimulant on Earth. Found in plant seeds, leaves, and fruit, such as coffee beans, caffeine possesses strong dopaminergic activity. This means it stimulates the release of the natural neurotransmitter dopamine, generating intense mental focus and improved mood. Caffeine has the ability to replace adenosine, a chemical which the body uses to regulate over-excited nerve reactions. Caffeine’s benefits include better concentration and control, the stimulation of creative thoughts, physical energy, and improved memory. Over the long term, caffeine can possibly prevent serious conditions like Parkinson’s disease and colon cancer. Caffeine’s mood enhancing effects are strong but short-lived, and may cause addiction and withdrawals after extended use.

Memory: ★★★★★ ★★★★★ ★★★★★ ★★★★★
Focus: ★★★★★ ★★★★★ ★★★★★ ★★★★★
Mood: ★★★★★ ★★★★★ ★★★★★ ★★★★★

Green Tea

Green Tea is a commonly consumed stimulant derived from the leaves of the Camellia sinensis plant. It can be boiled into a beverage or extracted into a supplement powder. Green tea has a high concentration of flavonoids, phytochemicals with very strong antioxidant benefits. Green tea also contains the stimulant caffeine, though in smaller amounts than in coffee. This natural tea lowers blood sugar and stimulates fat burning, via a synergistic relationship between the supplement and noradrenaline. Green tea also contains L-Theanine, a noted anti-stress and anti-anxiety compound. Its benefits include enhanced wakefulness, increased mental focus, better memory, heightened concentration, and energy. It has excellent anti-oxidant properties, and boosts overall immunity. Green tea can also lift mood, without the harsher side effects associated with other caffeine supplements.

Memory: ★★★★★ ★★★★★ ★★★★★ ★★★★★
Focus: ★★★★★ ★★★★★ ★★★★★ ★★★★★
Mood: ★★★★★ ★★★★★ ★★★★★ ★★★★★